EXPERT REPORT OF DR. RANDI ETTNER, PH.D.

Randi Ettner, being duly sworn upon her oath, says that:

Introduction

I am a clinical and forensic psychologist with expertise concerning the diagnosis and treatment of gender dysphoria. I have been retained by counsel for Plaintiff Autumn Cordellione' (also known as Jonathan Richardson) to provide the Court with my expert evaluation and opinion regarding the appropriateness of the treatment for gender dysphoria provided by the Defendants, and the appropriateness of a blanket policy of denying prisoners what Indiana law has labelled 'sexual reassignment surgery' This declaration provides my opinions and conclusions, including (i) scientific information regarding gender dysphoria and its impact on the health and well-being of individuals living with gender dysphoria; (ii) information regarding best practices and the generally accepted standards of care for individuals with gender dysphoria; and (iii) the results of my review of Ms. Cordellione's treatment for gender dysphoria I have actual knowledge of the matters stated herein and could and would so testify if called as a witness.

Qualifications

I am a licensed clinical and forensic psychologist with a specialization in the diagnosis, treatment, and management of gender dysphoric individuals. I received my doctorate in psychology (with honors) from Northwestern University in 1979. I am a Fellow and Diplomate in Clinical Evaluation of the American Board of Psychological Specialties, and a Fellow and Diplomate in Trauma/Post-Traumatic Stress Disorder. During the course of my career, I have evaluated, diagnosed, and treated 3,000 individuals with gender dysphoria and mental health issues related to gender variance from 1977 to present.

I have published four books related to the treatment of individuals with gender dysphoria, including the medical text entitled *Principles of Transgender Medicine and Surgery* (co-editors Monstrey & Eyler; Rutledge 2007); and the 2nd edition (co-editors Monstrey & Coleman; Routledge, 2016). In addition, I have authored numerous articles in peer-reviewed journals regarding the provision of health care to the transgender population.

I am a co-author of the World Professional Association for Transgender Health ("WPATH") *Standards of Care for the Health of Transsexual, Transgender and Gender Nonconforming People, Version 7* ("SOC-7"), published in 2012, and *Standards of Care for the Health of Transgender and Gender Diverse People, Version 8* ("SOC-8"), published in 2022. For SOC-8, I was the co-lead for the chapter on "Applicability of the Standards of Care to People Living in Institutional Environments." WPATH is an international association of 2,800 medical and mental health professionals worldwide specializing in the treatment of gender diverse people and dedicated to the understanding and treatment of gender dysphoria worldwide. I was Secretary and served as a member for more than twelve years on the Board of Directors of WPATH.

I chair the WPATH Committee for Institutionalized Persons and provide training to medical professionals on healthcare for transgender inmates. I have also been a consultant to

policy makers regarding appropriate care for transgender inmates and the Centers for Medicare and Medicaid in the state of Illinois.

I have also served as a member of the University of Chicago Gender Board, and on the editorial boards of *Transgender Health* and the *International Journal of Transgender Health*. I am the honoree of the externally funded Randi and Fred Ettner Fellowship in Transgender Health at the University of Minnesota.

I have been an invited guest at the National Institutes of Health to participate in developing a strategic research plan to advance the health of sexual and gender minorities, and in November, 2017, was invited to address the Director of the Office of Civil Rights of the United States Department of Health and Human Services regarding the medical treatment of gender dysphoria. I received a commendation from the U.S. Congress House of Representatives on February 5, 2019 recognizing my work for WPATH and gender dysphoria in Illinois.

I have lectured throughout North America, Europe, South America, and Asia on topics related to gender dysphoria and have given grand rounds on gender dysphoria at university hospitals. I have been a consultant to news media and have been interviewed as an expert on gender dysphoria for hundreds of television, radio and print articles throughout the country.

I have been retained as an expert regarding gender dysphoria and the treatment of gender dysphoria in multiple court cases and administrative proceedings, including cases involving the treatment of individuals with gender dysphoria in prison settings. Over the past four years, I have given expert testimony at trial or by deposition in the following cases: *D.T. v. Christ*, No. 4:20-cv-484-JAS (D. Ariz.); *Kenautica Zayre-Brown v. North Carolina Dept. of Public Safety,* No. 3:22-cv-00191 (W.D.N.C.); *Roe v. Herrington*, No. 4:20-cv-00484-JAS 9 (D. Ariz.); *Diamond v. Ward*, No. 5:20-cv-00543 (M.D. Ga.); *Stillwell v. Dwenger*, No. 1:21-cv-1452-JRS-MPB (S.D. Ind.); *Letray v. Jefferson Cty.*, No. 20-cv-1194 (N.D.N.Y.); *C.P. v. BCBSIL*, No. 3:20-cv-06145-RJB (W.D. Wash.); *Cecilia Gilbert v. Dell Technologies,* No. 1:19-cv-01938 (JGH) JAMS No. 1425032318; *Kadel v. Folwell*, No. 1:19-cv-00272 (M.D.N.C.); *Iglesias v. Connor*, No. 19-cv-0415-RJN (S.D. Ill.); *Monroe v. Jeffreys*, No. 18-15-156-NJR (S.D. Ill.); *Singer v. Univ. of Tennessee Health Sciences Ctr.*, No. 2:19-cv-02431-JPM-cgc (W.D. Tenn.); *Morrow v. Tyson Fresh Meats, Inc.,* No. 6:20-cv-02033 (N.D. Iowa); *Claire v. Fla. Dep't of Mgmt. Servs.,* No. 4:20-cv-00020-MW-MAF (N.D. Fla.); *Williams v. Allegheny Cty.*, No. 2:17-cv-01556-MJH (W.D. Pa.); *Gore v. Lee*, No. 3:19-CV-00328 (M.D. Tenn.); *Eller v. Prince George's Cnty. Public Sch.*, No. 8:18-cv-03649-TDC (D. Md.); *Monroe v. Baldwin*, No. 18-CV-00156-NJR-MAB (S.D. Ill.); *Ray v. Acton*, No. 2:18-cv-00272 (S.D. Ohio); *Soneeya v. Turco*, No. 07-12325-DPW (D. Mass.); *Edmo v. Idaho Dep't of Correction*, No. 1:17-CV-00151-BLW (D. Idaho).

A true and correct copy of my Curriculum Vitae, which provides a complete overview of my education, training, and work experience and a full list of my publications, is attached hereto as Appendix A.

I am being compensated at the hourly rate of $375.00 for my time spent preparing this report. I will be compensated $525.00 per hour for deposition testimony or trial testimony. I will receive a flat fee of $2,500.00 for out-of-town travel and will be reimbursed for reasonable expenses incurred.

Materials Considered

I have considered information from various sources in forming my opinions enumerated herein, in addition to drawing on my extensive experience and review of the literature related to gender dysphoria over the past three decades. Attached as Appendix B is a bibliography of relevant medical and scientific materials related to transgender people and gender dysphoria. I generally rely on these materials when I provide expert testimony, in addition to the documents specifically cited as supportive examples in particular sections of this declaration.
In preparing this report, I also reviewed and relied on medical and mental health records of Ms. Cordellione', as well as ; the Complaint for Declaratory and Injunctive Relief and Notice to Challenge of Constitutionality of Indiana Statute; and the deposition of Dr. Adrienne Bedford, and the Indiana Department of Correction's Health Care Services Directive 2.17A, entitled "Health Services for Transgender and Gender Diverse Patients"

Lastly, I conducted and have relied on an extensive video conferencing interview and assessment of Ms. Cordellione'. In connection with my evaluation of Ms. Cordellione', I administered four standardized psychometric test instruments with high levels of reliability and validity: the *Beck Depression Inventory-II*, the *Beck Anxiety Scale*, the *Beck Hopelessness Scale* and the *Traumatic Symptom Inventory-ll*.

Gender Dysphoria

The term "gender identity" is a well-established concept in medicine, referring to one's internal sense of oneself as belonging to a particular gender. Every person has a gender identity. All human beings develop this elemental internal conviction of belonging to a particular gender, such as male or female.

At birth, infants are typically classified as male or female. This classification becomes the person's birth-assigned gender. Typically, persons born with the external physical characteristics of males psychologically identify as men, and those with the external physical characteristics of females psychologically identify as women. However, for transgender individuals, this is not the case. For transgender individuals, the sense of one's self—one's gender identity—differs from their birth-assigned gender, giving rise to a sense of being "wrongly embodied."

The only difference between transgender people and cisgender people is that the latter have gender identities that are consistent with their birth-assigned sex whereas the former do not. A transgender man cannot simply turn off his gender identity like a switch, any more than anyone else could.

For some individuals, the incongruence between gender identity and assigned gender does not create clinically significant distress. However, for others, the incongruence results in gender dysphoria, a serious medical condition characterized by clinically significant, persistent feeling of stress and discomfort with one's assigned gender.

In 1980, the American Psychiatric Association ("APA") introduced the diagnosis Gender Identity Disorder ("GID") in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). The GID diagnosis was maintained in a revised version of DSM, known as DSM-III-R (1987), as well as in DSM-IV which was issued in 1994.

In 2013, with the publication of DSM-5, the GID diagnosis was removed and replaced with Gender Dysphoria. This new diagnostic term was based on significant changes in the understanding of the condition of individuals whose birth-assigned sex differs from their gender

identity. The change in nomenclature was intended to acknowledge that gender incongruence, in and of itself, does not constitute a mental disorder. Nor is an individual's identity disordered. Rather, the diagnosis is based on the distress or dysphoria that some transgender people experience as a result of the incongruence between assigned sex and gender identity and the social problems that ensue.

The DSM explained that the former GID diagnosis connoted "that the patient is 'disordered.'" APA, Gender Dysphoria (2013). But, as the APA explained, "[i]t is important to note that gender nonconformity is not in itself a mental disorder. The critical element of Gender Dysphoria is the presence of clinically significant distress associated with the condition." *Id.* By "focus[ing] on dysphoria as the clinical problem, not identity per se," the change from GID to Gender Dysphoria destigmatizes the diagnosis. APA, Diagnostic and Statistical Manual of Mental Disorders (5th ed. 2013).

In addition, the categorization of gender dysphoria and its placement in the DSM system is different for gender dysphoria than it was for GID. In every version of the DSM prior to 2013, GIDs were a subclass of some broader classification, such as Disorders Usually First Evident in Infancy, Childhood, or Adolescence, or alongside other subclasses such as Developmental Disorders, Eating Disorders, and Tic Disorders. For the first time ever, DSM-5 categorizes the diagnosis separately from all other conditions. Under DSM-5, Gender Dysphoria is classified on its own.

Similarly recognizing that being transgender is not a mental illness, the World Health Organization ("WHO") likewise reclassified the gender incongruence diagnosis in the International Classification of Diseases-11 ("ICD-11"), removing gender incongruence form the chapter on mental and behavioral disorders.

Thus, today, gender dysphoria is both the name of the formal psychological diagnosis and the psychiatric term for the severe and unremitting emotional pain that the condition gives rise to.

The diagnostic criteria for "Gender Dysphoria in Adolescents and Adults" in DSM-5 published by the American Psychiatric Association, are as follows:

A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:
    1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics).
    2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated sex characteristics).
    3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
    4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
    5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).

6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).

B. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

In addition to renaming and reclassifying gender dysphoria, the medical research supporting the gender dysphoria diagnosis has evolved. Unlike DSM's treatment of GID, the DSM-5 includes a section entitled "Genetics and Physiology," which discusses the genetic and hormonal contributions to Gender Dysphoria. *See* DSM-5 at 457 ("For individuals with gender dysphoria … some genetic contribution is suggested by evidence for (weak) familiarity of transsexualism among nontwin siblings, increased concordance for transsexualism in monozygotic compared with dizygotic same-sex twins, and some degree of heritability of gender dysphoria").

As evidenced throughout the scientific and medical literature, gender identity has a strong biological basis and a physiological and biological etiology. For example, it has been demonstrated that transgender women, transgender men, non-transgender women, and non-transgender men have different brain composition, with respect to the white matter of the brain, the cortex (central to behavior), and subcortical structures. *See, e.g*., Rametti et al., *White Matter Microstructure in Female to Male Transsexuals Before Cross-Sex Hormonal Treatment: A Diffusion Tensor Imaging Study*, 45 J. Psychiatric Res. 199–204 (2011); Rametti et al., *The Microstructure of White Matter in Male to Female Transsexuals Before Cross-Sex Hormonal Treatment: A DTI Study*, 45 J. Psychiatric Res. 949–54 (2011); Luders et al., *Gender effects on cortical thickness and the influence of scaling*, 2 J. Behav. & Brain Sci. 357, 360 (2006); Krujiver et al*., Male-to- female transsexuals have female neuron numbers in a limbic nucleus*, 85 J. Clin. Endocr. Met., 2034–41 (2000).

Interestingly, differences between transgender and non-transgender individuals primarily involve the right hemisphere of the brain. The significance of the right hemisphere is important because that is the area that relates to attitudes about bodies in general, one's own body, and the link between the physical body and the psychological self. Attached as Appendix C is a table depicting the brain areas that differ.

It is now believed that gender dysphoria evolves as a result of the interaction of the developing brain and sex hormones. For example, one peer-reviewed paper noted that: [d]uring the intrauterine period a testosterone surge masculinizes the fetal brain, whereas the absence of such a surge results in a feminine brain. As sexual differentiation of the brain takes place at a much later stage in the development than sexual differentiation of the genitals, these two processes can be influenced independently of each other. Sex differences in cognition, gender identity . . . , sexual orientation . . . , and the risks of developing neuropsychiatric disorders are programmed into our brain during early development. There is no evidence that one's postnatal social environment plays a crucial role in gender identity or sexual orientation. Garcia-Falgueras & Swaab, *Sexual Hormones and the Brain: As Essential Alliance for Sexual Identity and Sexual Orientation,* 17 Pediatric Neuroendocrinology 22–25 (2010).

Similarly, Lauren Hare et al. finds that *"*a decrease in testosterone levels in the brain during development might result in incomplete masculinization of the brain . . . resulting in a

more feminized brain and a female gender identity." Hare et al., *Androgen Receptor Repeat Length Polymorphism Associated with Male-to- Female Transsexualism,* 65 Biological Psychiatry 93, 93, 96 (2009).

Because gender identity has a biological basis, efforts to change an individual's gender identity are therefore both futile and unethical. Past attempts to "cure" transgender individuals by means of psychotherapy, aversion treatments, or electroshock therapy, in order to change their gender identity to match their birth-assigned sex, have proven ineffective and caused extreme psychological damage. All major associations of medical and mental health providers, such as the American Medical Association, the American Psychiatric Association, the American Psychological Association, and WPATH's Standards of Care, consider such efforts unethical.

Treatment of Gender Dysphoria

WPATH Standards of Care

Gender dysphoria can be ameliorated or even effectively cured through adequate medical treatment. There is a clear consensus in the medical community that gender dysphoria is a serious condition that requires medical, and often surgical intervention..

Once a diagnosis of gender dysphoria is established, individualized treatment should be initiated. Without treatment, individuals with gender dysphoria experience anxiety, depression, suicidality, and other attendant mental health issues and are often unable to adequately function in occupational, social, or other areas of life.

The medically accepted standards of care for treatment of gender dysphoria are set forth in the WPATH Standards of Care, first published in 1979.[1]

The WPATH-promulgated Standards of Care are the internationally recognized guidelines for the treatment of persons with gender dysphoria and inform medical treatment throughout the world.

The American Medical Association, the Endocrine Society, the American Psychological Association, the American Psychiatric Association, the World Health Organization, the American Academy of Family Physicians, the American Public Health Association, the National Association of Social Workers, the American College of Obstetrics and Gynecology and the American Society of Plastic Surgeons all endorse protocols in accordance with the SOC. *See, e.g.*, American Medical Association (2008) Resolution 122 (A-08); Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline (2009); American Psychological Association Policy Statement on Transgender, Gender Identity and Gender Expression Nondiscrimination (2009).

[1] Throughout this report, I make references to the 7th version of the WPATH SOC, published in 2012, as that was the version of the SOC in effect for much of the time period for which Ms. Cordellione' has been seeking treatment of her gender dysphoria. On September 15, 2022, WPATH published the 8th version of the SOC. None of my opinions set forth in this report depend on whether the 7th or 8th versions of the SOC apply; surgery is medically necessary for Ms. Cordellione' and as I explain below, she meets the criteria for surgery under both versions. Version 7 of the WPATH SOC is available in full at https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7_English.pdf. Version 8 of the WPATH SOC is available in full at https://www.tandfonline.com/doi/pdf/10.1080/26895269.2022.2100644.

As part of the SOC, many transgender individuals with gender dysphoria undergo a medically-indicated and supervised gender transition in order to ameliorate their gender dysphoria and live life consistent with their gender identity. The SOC recommend an individualized approach to gender transition, consisting of one or more of the following protocol components of evidence-based care for gender dysphoria:

- Changes in gender expression and role (which may involve living part time or full time in another gender role, consistent with one's gender identity);
- Hormone therapy to feminize or masculinize the body;
- Surgery to change primary and/or secondary sex characteristics (e.g. breasts/chest, external and/or internal genitalia, facial features, body contouring);
- Psychotherapy (individual, couple, family, or group) for purposes such as exploring gender identity, role, and expression; addressing the negative impact of gender dysphoria and stigma on mental health; alleviating internalized transphobia; enhancing social and peer support improving body image; or promoting resilience.

"Medical necessity" is a term used by the insurance industry and government health care programs to describe treatment that a physician considers to be vital for a particular patient. According to the American Medical Association ("AMA"), health care is medically necessary when a "prudent physician" selects it for the purpose of preventing, diagnosing or treating an illness, injury, disease or its symptoms in a manner that is: (a) in accordance with generally accepted standard of medical practice; (b) clinically appropriate in terms of type, frequency, extent, site, and duration; and (c) not primarily for the convenience of the patient, physician, or other health care provider." AMA Policy H-320.953 (2016). The AMA specifically has recognized that "medical and surgical treatments for gender dysphoria, as determined by shared decision making between the patient and physician, are medically necessary as outlined by generally-accepted standards of medical and surgical practice." AMA Policy H-185.927 (2021). Likewise, the authoritative SOC conclude that, for many transgender individuals, gender-affirming "surgery is essential and medically necessary to alleviate their gender dysphoria."

Once a diagnosis of gender dysphoria is made, a treatment plan should be developed based on an individualized assessment of the medical needs of the particular patient. Although the SOC acknowledges the need to suit treatment to individual, clinical, and social circumstances, broad per se policies restricting or denying particular types of care to individuals in prisons—like a refusal to provide gender affirming surgery under any circumstances—are inconsistent with the SOC and the requirements to provide medically necessary treatment based on what is medically indicated and necessary for the individual. *See* WPATH SOC-7 at 68 ("Denial of needed changes in gender role or access to treatments, including sex reassignment surgery, on the basis of residence in an institution are not reasonable accommodations under the SOC."); WPATH SOC-8 at S107 ("The denial of medically necessary evaluations for, and the provision of, gender affirming surgical treatments and necessary aftercare [in institutional settings] is inappropriate and inconsistent with these Standards of Care.").

The development of any treatment plan and all subsequent treatment must be administered by clinicians qualified in treating patients with gender dysphoria. The SOC specify the qualifications that professionals must meet in order to provide care to gender dysphoric patients. In particular, the SOC provide that all mental health professionals should have certain minimum credentials before treating patients with gender dysphoria, including a master's degree (or equivalent) in a clinical behavioral science field; competencies in using the DSM-5 and/or the International Classification of Diseases for diagnostic purposes; ability to recognize and diagnose co-existing mental health concerns and to distinguish these from gender dysphoria; documented supervised training and competence in psychotherapy or counseling; knowledge of gender nonconforming identities and expressions, and the assessment and treatment of gender dysphoria; and continuing education in the assessment and treatment of gender dysphoria.

Importantly, the SOC require that "[m]ental health professionals who are new to the field (irrespective of their level of training and other experience) should work under the supervision of a mental health professional with established competence in the assessment and treatment of gender dysphoria." SOC-7 at 23; *see also* SOC-8 at S34 (providers "should have experience or be qualified to assess clinical aspects of gender dysphoria, incongruence, and diversity"). Self-study cannot substitute for first-hand clinical experience in treating the range of clinical presentations of gender dysphoria, or the mentorship and supervision of an expert in this field.

In addition to these minimum credentials, clinicians working with gender dysphoric patients should develop and maintain cultural competence to provide optimal care. A growing body of scientific literature underlies this specialized area of medicine and presents advances in treatment that inform care. Treatment plans generated by providers lacking the requisite experience can result in inappropriate care, or place patients at significant risk.

Social Role Transition and Psychotherapy

For many individuals with gender dysphoria, changes to gender expression and role to feminize or masculinize one's appearance, often called "social transition," are an important part of treatment for the condition. This involves dressing, grooming and otherwise outwardly presenting oneself through social signifiers of gender consistent with one's gender identity. This is an appropriate and necessary part of identity consolidation. Through this experience, the shame of growing up living as a "false self" and the grief of being born into the "wrong body" can be ameliorated. *See, e.g.*, Greenberg & Laurence 1981; Ettner 1999; Devor 2004.

While psychotherapy or counseling can provide support and help with the personal and social aspects of a gender transition, they are not a substitute for medical intervention where medical intervention is needed, nor are they preconditions for such intervention. By analogy, in type one diabetes, counseling might provide psychoeducation about living with a chronic condition, and information about nutrition, but it does not obviate the need for insulin.

Hormone Therapy

For almost all individuals with persistent, well-documented gender dysphoria, hormone therapy is essential and medically indicated treatment to alleviate the distress of the condition. The SOC and other materials make this point clear. *See* SOC-7 at 33 "[F]eminizing/masculinizing

hormone therapy—the administration of exogenous endocrine agents to induce feminizing or masculinizing changes—is a medically necessary intervention for many transsexual, transgender, and gender non-conforming individuals with gender dysphoria."); SOC-8 at S110 ("Transgender and gender diverse . . . persons may require medically necessary gender-affirming hormone therapy . . . to achieve changes consistent with their embodiment goals, gender identity, or both[.]").

Hormone therapy is a well-established and effective means of treating gender dysphoria. The American Medical Association, the Endocrine Society, the American Psychiatric Association, and the American Psychological Association all agree that hormone therapy in accordance with the WPATH Standards of Care is medically necessary treatment for many individuals with gender dysphoria. *See* e.g., American Medical Association, *Issue Brief: Health Insurance coverage for gender affirming care of transgender patients* (2019); American Psychiatric Association, *Position Statement on Access to Care for Transgender and Gender Diverse Individuals* (2018); Endocrine Society, *Transgender Health, an Endocrine Society position statement* (2020).

The goals of hormone therapy for individuals with gender dysphoria are: (i) to significantly reduce hormone production associated with the person's sex assigned at birth and, thereby, the secondary sex characteristics of the individual's sex assigned at birth; and (ii) to replace circulating sex hormones associated with the person's sex assigned at birth with feminizing or masculinizing hormones, using the principles of hormone replacement treatment developed for hypogonadal patients (i.e., non-transgender males born with insufficient testosterone or non-transgender females born with insufficient estrogen). *See* Hembree, et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, The Journal of Clinical Endocrinology and Metabolism, 102(11), 3869–3903 (2017); Hembree, et al., *Endocrine treatment of transsexual persons: an Endocrine Society clinical practice guideline*, The Journal of Clinical Endocrinology and Metabolism, 94(9), 3132–3154 (2009).

The therapeutic effects of hormone therapy are twofold: (i) with endocrine treatment, the patient acquires congruent sex characteristics, i.e., for transgender women, breast development, redistribution of body fat, cessation of male pattern baldness, and reduction of body hair; and (ii) hormones act directly on the brain, via receptors sites for sex steroids, which produces an attenuation of dysphoria and attendant psychiatric symptoms, and the promotion of a sense of well-being. *See, e.g.*, Cohen-Kettenis & Gooren 1993.

The efficacy of hormone therapy to treat gender dysphoria is observed clinically and is well documented in the literature. For example, in one study, researchers investigated 187 transgender individuals who had received hormones and compared them with a group of transgender individuals who did not. Untreated individuals showed much higher levels of depression, anxiety, and social distress than those who received hormone therapy. *See* Rametti, et al. 2011; *see also* Colizzi et al. 2014; Gorin-Lazard et al. 2014; Gorin-Lazard et al. 2011.

Gender-Affirming Surgery

For some individuals with severe gender dysphoria, hormone therapy alone is insufficient, as chemical suppression cannot offset the production of nascent hormones. Relief from their dysphoria cannot be achieved without surgical intervention to modify primary sex characteristics, i.e., genital reconstruction. Under the contemporary understanding of gender

identity, transition-related medical treatments confirm, not "change," an individual's sex by aligning primary and secondary sex characteristics with a person's gender identity.

> Version 7 of the WPATH Standards of Care state:
> While many transsexual, transgender, and gender- nonconforming individuals find comfort with their gender identity, role, and expression without surgery, for many others surgery is essential and medically necessary to alleviate their gender dysphoria . . . For the latter group, relief from gender dysphoria cannot be achieved without modification of their primary and/or secondary sex characteristics to establish greater congruence with their gender identity. WPATH SOC-7 at 54-55.

> Version 8 of the WPATH Standards of Care similarly state:
> Medically necessary gender-affirming interventions are discussed in SOC-8. These include but are not limited to . . . genital reconstruction, for example, phalloplasty and metoidioplasty, scrotoplasty, and penile and testicular prostheses, penectomy, orchiectomy, . . . [and] hair removal from the face, body, and genital areas for gender affirmation or as part of a preoperative preparation process. . .Access to assessment and treatment for [transgender] people seeking [gender-affirming medical and/or surgical treatments] is critical given the clear medical necessity of these interventions and the profound benefits they offer to [transgender] people. WPATH SOC-8 at S18, S32.

Genital reconstruction surgery for transgender women has two therapeutic purposes. First, removal of the testicles eliminates the major source of testosterone in the body. Second, the patient attains body congruence resulting from the uro-genital structures appearing and functioning as is typical for non-transgender women. Both are critical in alleviating or eliminating gender dysphoria. Additionally, breast augmentation and hair removal procedures play a critical role in treatment.

Decades of careful and methodologically sound scientific research have demonstrated gender affirming surgery is a safe and effective treatment for severe gender dysphoria and, indeed, for many people, it is the only effective treatment, and is therefore medically necessary. *See, e.g.*, Pfäfflin & Junge 1998; Smith et al. 2005; Jarolím et al. 2009.

WPATH, the American Medical Association, the Endocrine Society, and the American Psychological Association all support surgery in accordance with the SOC as medically necessary. *See*, *e.g.*, American Medical Association, *Resolution 122 (A-08)* (2008) (characterizing WPATH SOC as "established internationally accepted Standards of Care for providing medical treatment for people with GID, including mental health care, hormone therapy and sex reassignment surgery, which are designed to promote the health and welfare of persons with GID and are recognized within the medical community to be the standard of care for treating people with GID"); American Psychiatric Association, *Medical Treatment and Surgical Interventions* (Nov. 2017) (endorsing medical treatment recommendations from WPATH SOC); American Psychological Association, *Guidelines for Psychological Practice With Transgender and Gender Nonconforming People* (Dec. 2015) (referencing and endorsing WPATH SOC for treatment); American Psychological Association, *Report of the Task Force on Gender Identity and Gender Variance* (2009) (referencing WPATH SOC and noting that "[f]or individuals who

experience such distress, hormonal and/or surgical sex assignment may be medically necessary to alleviate significant impairment in interpersonal and/or vocational functioning . . . [and] recommended in clinical practice, sex reassignment surgery is almost always medically necessary, not elective or cosmetic"); American Academy of Child & Adolescent Psychiatry, *Clinical Guidelines & Training for Providers, Professionals, and Trainees* ("The Standards of Care document is the international gold standard outlining the guidelines for the clinical treatment of gender dysphoria"); Rafferty, J., American Academy of Pediatrics Committee on Psychological Aspects of Child and Family Health, AAP Committee on Adolescence, & AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, *Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents*, Pediatrics, 142(4), 1-14 (2018) ("Most protocols for gender-affirming interventions incorporate [WPATH] and Endocrine Society recommendations"); World Professional Association for Transgender Health, *WPATH Policy Statements* (Dec. 16, 2016) (noting statements in support of WPATH Standards of Care by the American Medical Association, the Endocrine Society, the American Psychiatric Association, the American Psychological Association, the American Academy of Family Physicians, the National Commission of Correctional Health Care, the American Public Health Association, the National Association of Social Workers, the American College of Obstetrics and Gynecology, the American Society of Plastic Surgeons, and the World Health Organization); Hembree, W.C., et al., *Endocrine Treatment for Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, The Journal of Clinical Endocrinology & Metabolism, 102(11), 3869-3903 (2017) (setting out Endocrine Society standards of care and endorsing WPATH SOC). I am not aware of any reputable medical organizations that do not recognize that gender-affirming surgical interventions may be medically necessary for certain transgender persons.

Surgeries are considered "effective" from a medical perspective if they "have a therapeutic effect." *See* Monstrey et al. 2007. More than three decades of research confirms that gender-affirming surgery is therapeutic and therefore an effective treatment for gender dysphoria.

In a 1998 meta-analysis, Pfäfflin and Junge reviewed data from 80 studies, spanning 30 years, from 12 countries. They concluded that "reassignment procedures were effective in relieving Gender Dysphoria. There were few negative consequences and all aspects of the reassignment process contributed to overwhelmingly positive outcomes." Pfäfflin & Junge 1998.

Numerous subsequent studies confirm this conclusion. Researchers reporting on a large-scale prospective study of 325 individuals in the Netherlands concluded that after gender-affirming surgery there was "a virtual absence of gender dysphoria" in the cohort and "results substantiate previous conclusions that sex reassignment is effective." Smith et al. 2005. Indeed, the authors of the study concluded that the surgery "appeared therapeutic and beneficial" across a wide spectrum of factors and "[t]he main symptom for which the patients had requested treatment, Gender Dysphoria, had decreased to such a degree that it had disappeared." *Id.*

In 2007, Gijs and Brewayes analyzed 18 studies published between 1990 and 2007, encompassing 807 patients. The researchers concluded: "Summarizing the results from the 18 outcome studies of the last two decades, the conclusion that [gender-affirming surgery] is the most appropriate treatment to alleviate the suffering of extremely gender dysphoric individuals

still stands: Ninety-six percent of the persons who underwent [surgery] were satisfied and regret was rare."

Studies conducted in countries throughout the world conclude that surgery is an extremely effective treatment for gender dysphoria. For example, a 2001 study published in Sweden states: "The vast majority of studies addressing outcome have provided convincing evidence for the benefit of sex reassignment surgery in carefully selected cases." Landen 2001. Similarly, urologists at the University Hospital in Prague, Czech Republic, in a Journal of Sexual Medicine article concluded, "Surgical conversion of the genitalia is a safe and important phase of the treatment of male-to-female transsexuals." Jarolím 2009.

Patient satisfaction is an important measure of effective treatment. Achieving functional and normal physical appearance consistent with gender identity alleviates the suffering of gender dysphoria and enables the patient to function in everyday life. Studies have shown that by alleviating the suffering and dysfunction caused by severe gender dysphoria, gender-affirming surgery improves virtually every facet of a patient's life. This includes satisfaction with interpersonal relationships and improved social functioning, *see e.g.*, Rehman et al. 1999; Johansson et al. 2010; Hepp et al. 2002; Ainsworth & Spiegel 2010; Smith et al. 2005, improvement in self-image and satisfaction with body and physical appearance, Lawrence 2003; Smith et al. 2005; Weyers et al. 2009, and greater acceptance and integration into the family, Lobato et al. 2006.

Studies have also shown that surgery improves patients' abilities to initiate and maintain intimate relationships. *See, e.g.*, Lobato et al. 2006; Lawrence 2005; Lawrence 2006; Imbimbo et al. 2009; Klein & Gorzalka 2009; Jarolím et al. 2009; Smith et al. 2005; Rehman et al. 1999; De Cuypere et al. 2005.

Multiple long-term studies have confirmed these results. *See, e.g.*, "Transsexualism in Serbia: a twenty-year follow-up study," Vujovic et al. 2009; "Long-term assessment of the physical, mental, and sexual health among transsexual women," Weyers et al. 2009; "Treatment follow-up of transsexual patients," Hepp et al. 2002; "A five-year follow-up study of Swedish adults with gender identity disorder," Johansson et al. 2010; "A report from a single institute's 14 year experience in treatment of male-to-female transsexuals," Imbimbo et al. 2009; "Follow up of sex reassignment surgery in transsexuals: a Brazilian cohort," Lobato et al. 2006.

Given the extensive experience and research supporting the effectiveness of gender affirming surgery spanning decades, it is clear that surgery is a medically necessary, not experimental, treatment for severe gender dysphoria as demonstrated by its inclusion as a medically necessary treatment in the SOC.

In 2008, WPATH issued a "Medical Necessity Statement" expressly stating: "These medical procedures and treatment protocols are not experimental: decades of both clinical and medical research show they are essential to achieving well-being for the transsexual patient."

On September 25, 2013, the Department of Health Care Services of the State of California Health and Human Services Agency issues All Plan Letter 13-011, which makes clear that gender confirmation surgery was a covered service for Medi-Cal beneficiaries when the surgery was not cosmetic in nature and referred providers to the WPATH Standards of Care for the "criteria for the medical necessity of transgender services."

On May 30, 2014, the Appellate Division of the Departmental Appeals Board of the United States Department of Health and Human Services issued decision number 2576, in which

the Board determined that a Medicare regulation denying coverage of "all transsexual surgery as a treatment for transsexualism" was not valid under the "reasonableness standard." The Board specifically concluded that "transsexual surgery is an effective treatment option for transsexualism in appropriate cases."

The corpus of studies increases yearly as access to gender confirmation surgery increases. For example, a group at Cornell University conducted a systematic review of the scientific literature from 1991 to June 2017 on the outcomes of gender confirming surgeries for transgender individuals, ultimately reviewing 56 studies. The results verify the efficacy of surgery: 52 studies (93%) reported beneficial effects, 4 studies reported mixed or null effects, and no studies demonstrated that gender confirming surgeries cause harm. *What does the scholarly research say about transition on transgender well-being?*, Cornell University (2019), https://whatweknow.inequality.cornell.edu/topics/lgbt-equality/what-does-the-scholarly-research-say-about-the-well-being-of-transgender-people//. A recent (2022) study by Parker, et al., reported on a series of patients who underwent gender confirming surgery forty years prior. The study revealed that high patient satisfaction and improvement in mental health persisted decades after surgery.

Living Consistently with Gender Identity

The SOC establish the therapeutic importance of changes in gender expression by means of social signifiers that align with gender identity. Gender dysphoria, like many medical conditions, often requires more than a single intervention for effective treatment. For example, clothing and grooming that affirm one's gender identity, such as bras for transgender females, and the use of congruent pronouns are critically important components of treatment protocols. *See* Greenberg & Laurence 1981; Ettner 1999; Devor 2004.

The SOC also specifically provide that hair removal, the elimination of a visible secondary sex characteristic, is significant in alleviating gender dysphoria for transgender women. Other gender-appropriate grooming items such as feminine deodorant, moisturizer, hair care, and make-up may also be necessary for treatment. These accoutrements are critical to the social transition and mental wellbeing of gender dysphoric people. Clothing and grooming items are particularly important to provide to transgender patients, especially for those individuals who have initiated hormone therapy. The physical changes facilitated by hormones in these patients make gender-affirming clothing and grooming items necessary not only for the mental health of these patients, but also for their basic physical comfort and dignity. For example, for transgender women, female undergarments allow genitals to be tucked and less visible, reducing symptoms of gender dysphoria. Social role transition—the ability for a transgender woman to appear feminine—has an enormous impact in the treatment of gender dysphoria. An early seminal study emphasized the importance of aligning presentation and identity and the benefits to mental health. Greenberg and Laurence compared the psychiatric status of gender dysphoric individuals who had socially transitioned with those who had not. Those who had implemented a social transition showed "a notable absence of psychopathology" compared to those who were presenting in their birth-assigned sex role. Greenberg & Laurence 1981. More recently, Sevelius (2013) proposed a "gender affirmation model" which demonstrated that access to gender affirming components of social role transition equated with better mental

health, fewer suicide attempts, and lower levels of depression and posttraumatic stress disorder ("PTSD") symptoms.

> "Mis-gendering"—the act or referring to a transgender person by the incorrect gender—is harmful to the mental health of transgender persons. It threatens their identity and exacerbates the mental health problems attendant to gender dysphoria. It is therefore important, especially for those charged with the medical treatment and mental health care of transgender persons with gender dysphoria, to use the correct, names and pronouns. (Bauer et al. 2015; Frost et al. 2015; Bockting 2014.) Sevelius and colleagues (2020) demonstrated that correct pronoun usage and the use of chosen names correlates with positive mental and physical health outcomes.

The Standards of Care Apply Equally in Correctional Settings

The treatment of incarcerated persons with gender dysphoria has been addressed in the SOC since 1998. As with protocols for the treatment of diabetes or other medical disorders, medical management of gender dysphoria for incarcerated individuals does not differ from protocols for non-institutionalized persons. For this reason, the SOC expressly state that all elements of the prescribed assessment and treatment are equally applicable to patients in prison.

Version 7 of the SOC, for example, provided that "The SOC in their entirety apply to all transsexual, transgender, and gender nonconforming people, irrespective of their housing situation," and "[h]ealth care for transsexual, transgender, and gender nonconforming people living in an institutional environment should mirror that which would be available to them if they were living in a non-institutional setting within the same community." WPATH SOC-7 at 67. It further emphasized that "[a]ccess to these medically necessary treatments should not be denied on the basis of institutionalization or housing arrangements." *Id.*

Version 8 of the SOC expanded the discussion of adequate care for incarcerated transgender individuals and emphasizes that "[a]ll of the recommendations of the Standards of Care apply equally to people living in . . . institutions. People should have access to these medically necessary treatments irrespective of their housing situation within an institution." WPATH SOC-8 at S104.

The National Commission on Correctional Health ("NCCHC") has long recommended treatment in accordance with the SOC for people in correctional settings. In 2009, the NCCHC adopted a Position Statement providing in relevant part that "[t]he management of medical (e.g., medically necessary hormone treatment) and surgical (e.g., genital reconstruction) transgender issues should follow accepted standards that have been developed by professionals with expertise in transgender health," referring expressly to the WPATH SOC. *See* NCCHC Position Statement, Transgender Health Care in Correctional Settings (October 18, 2009), https://www.prisonlegalnews.org/media/publications/national_commission_on_correctional_health_care_transgender_health_care_in_correctional_settings_2009.pdf. The 2009 position statement also emphasized that "[d]etermination of treatment necessary for transgender patients should be on a case-by-case basis," and "[w]hen determined to be medically necessary for a particular inmate, hormone therapy should be initiated and sex reassignment surgery considered on a case-by-case basis." *Id.* The NCCHC reaffirmed and expanded this position statement in 2015.

The most recent NCCHC Position Statement on transgender care was published in 2020, and reaffirmed and expanded on the NCCHC's prior position, including identifying the WPATH SOC as the standard of care in a correctional setting. In relevant part, the Statement provides that "[e]valuations to determine the medical necessity of gender-affirming surgical procedures will be performed on a case-by-case basis, applying a careful risk, benefit, and alternatives analysis. Gender-affirming procedures will be provided when determined to be medically necessary for a patient according to accepted medical standards." NCCHC, Position Statement on Transgender and Gender Diverse Health Care in Correctional Settings (2020), https://www.ncchc.org/wp-content/uploads/Transgender-and-Gender-Diverse-Health-Care-in-Correctional-Settings-2020.pdf. It also provides that "[h]ealth staff should recommend to custody leadership that commissary items and undergarments consistent with an individual's gender identity are available." *Id.*

Gender dysphoric prisoners are at heightened risk of threats to their physical safety and mental health. It is important for correctional facilities to consider appropriate housing and shower/bathroom facilities for transgender individuals. Each individual's gender identity and role, dignity, and personal safety should be taken into account in housing and other assignments. If the institution fails to do so, there can be serious consequences for mental and physical health. *See* Seelman, 2016.

Moreover, transgender women with feminine characteristics are at elevated risk for harm when housed in male prisons. Verbal harassment, physical abuse, sexual assault, and sexual coercion occur at an alarming rate, and too often there is inadequate protection.

I am aware that transgender prisoners have received gender-affirming surgery in the Federal Bureau of Prisons as well as in state prisons including, Illinois, Washington, Idaho, California, and Massachusetts.

Risks of Providing Inadequate Care

Inadequate care for gender dysphoria—the withholding of medically necessary treatment including surgery—can lead to serious psychological and physical harm.

Without adequate treatment, adults with gender dysphoria experience a range of debilitating psychological symptoms such as anxiety, depression, suicidality, and other attendant mental health issues. They are frequently socially isolated as they carry a burden of shame and low self-esteem, attributable to the feeling of being inherently "defective." This leads to stigmatization, and over time proves ravaging to healthy personality development and interpersonal relationships. Without treatment, many gender dysphoric people are unable to adequately function in occupational, social, or other areas of life.

In addition, inadequately-treated gender dysphoria will result in serious physical harm. Gender dysphoric individuals often have a profound discomfort or disgust of their genitalia. Many gender dysphoric women without access to appropriate care, particularly those incarcerated and without agency, are often so desperate for relief that they resort to life-threatening attempts at self-surgery, the removal of their testicles or penis. Brown & McDuffie 2009. These attempts can result in acute injuries, lasting physical injuries, or even death.

The depression and hopelessness associated with inadequately treated gender dysphoria can also cause suicidal ideation, which will result in actual suicide for many individuals. A recent survey found a 41% rate of suicide attempts among this population, which

is far above the baseline rates for North America. Research shows that the risk of suicide can be significantly diminished with prompt and effective treatment. *See, e.g.*, Bauer 2015.

Gender dysphoria also intensifies with age. As cortisol rises with normal aging, the ratio of DHEA to cortisol is affected, which acts to alter brain chemistry and intensify gender dysphoria. With the passage of time, prisoners who require surgical treatment will experience greater distress, and no means of relief. *See* Ettner 2013; Ettner & Wiley 2013. This is particularly deleterious for transgender prisoners serving long sentences. Because gender dysphoria entails clinically significant and persistent feelings of stress and discomfort with one's assigned gender, if it is not treated, those feelings intensify with time and can become critical. The results are serious and debilitating symptoms of anxiety, depression, and hopelessness. Without adequate, appropriate treatment, these individuals may not be capable of accomplishing simple everyday tasks, and may become increasingly socially withdrawn and isolated, which only serves to further exacerbate their symptoms.

In sum, the results of providing inadequate treatment for gender dysphoria are predictable and dire, and take one of three paths: profound psychological decompensation, surgical self-treatment, or suicide.

Autumn Cordellione': Clinical Interview and Assessment

Autumn Cordellione' is a 40-year-old (DOB 7/21/1982) transgender woman, assigned male at birth. On October 23, 2023, I interviewed Ms. Cordellione' to determine her current status and the adequacy of the medical treatment she is receiving. My two-hour assessment took place via videoconferencing, and included the administration of four statistically reliable and valid psychometric tests. Ms. Cordellione' was completely cooperative throughout the evaluation process, and I am confident that the opinions I hereafter render are reliable and valid to a reasonable degree of medical certainty.

At 5 feet 11 inches, and 213 pounds, Ms. Cordellione' appeared neatly groomed and wearing female clothing, and with obvious breast development. She wears female eyeglasses, is bald, and has visible tattoos on her head and arms. She appeared to be wearing light make-up.

Ms. Cordellione' was able to attend to the entire interview without agitation or restlessness. She engaged with ease, maintained eye contact throughout, and her affect was within normal range and congruent to content. She has no disorders of thought, and thought processes are logical, goal-directed, and without distortion. There are no delusions, obsessions, or compulsions. Memory and abstract reasoning are within normal limits. Language is fluent, speech is natural, and intelligence is at least in the average range (by estimation).

I administered four standardized psychometric indices with high levels of reliability and validity to corroborate my clinical assessment. These tests are routinely administered by psychologists: The *Beck Depression Inventory-II*, the *Beck Anxiety Scale,* the *Beck Hopelessness Scale* and the *Traumatic Symptom Inventory-ll* . Psychodiagnostic testing provides current, objective information regarding the presence and severity of symptoms. That said, anxiety and depression syndromes are prevalent in many mental disorders. Like "pain" or "fatigue," their mere presence does not provide sufficient information to be clinically useful. For example, an individual will experience pain from a head injury or a blockage in the ureter. The diagnosis and therapeutic interventions will differ in these two presentations. Similarly, anxiety and depression are multi-faceted constructs, and clinicians endeavor to disentangle the affective,

behavioral, and somatic symptoms of these phenomena. This is critical in determining the nature of a disorder, its severity, and appropriate treatment. The administration of psychometric tests greatly assists with differential diagnosis, allowing the clinician to respond with a full range of appropriate therapeutic interventions.

The Beck Anxiety Inventory: Ms. Cordellione' experiences symptoms associated with anxiety. The intensity of her symptoms is moderate, and represents subjective and neurophysiological aspects of anxiety. These include, for example, feeling her heart pounding/racing, feeling of choking, sweating (not due to heat), numbness, and fear of "the worst happening." This cluster of symptoms describes autonomic symptomatology, not subject to voluntary control or cognitive reappraisal.

The Beck Depression Inventory-II: Ms. Cordellione' scored in the severe range on this instrument. The pattern of her responses reflects a cognitive and affective dimension of depression. Clinical symptoms would include, for example, feelings of sadness, remorse, crying, and changes in sleep and appetite.

The Beck Hopelessness Scale: Ms. Cordellione' scores in the moderate range on scales measuring the extent of hopelessness. Hopelessness is a psychological construct that underlies a variety of mental health disorders. Hopeless individuals believe that their important goals cannot be attained and that their worst problems cannot be solved.

Traumatic Symptom Inventory-ll: This instrument measures the impact and severity of trauma-related symptoms and behaviors, and adverse life events, and assesses a wide range of potentially complex symptomatology. It is used by the US. Military to assess functioning of enlisted service members who have undergone trauma.

By allowing the simultaneous assessment of the diverse aspects of adverse events or trauma, eg. dysphoric mood, suicidality, somatization, self-functioning, *etc*., the TSI-2 provides considerable data about an individual's psychological state.

The clinical scales of the TSI-2 measure 12 different types of symptoms, which can be subsumed under four broad categories of distress: *Self-Disturbance, Posttraumatic Stress, Externalization*, and *Somatization*. *T* scores are used to interpret an individual's level of symptomatology. A *T* score is a linear transformation of a raw score, derived to have a mean of 50 and a standard deviation of 10. Similar to percentile scores, *T* scores provide information about the individual's scores relative to those of subjects in standardized samples. For example, a *T* score of 70 exceeds the scores obtained by 95% of the general population. Higher raw and *T* scores indicate a greater degree of symptomatology. *T* scores in the range of 60 to 64 are considered problematic (i.e. likely to have clinical implications), and those at or above 65 are considered clinically elevated (i.e. symptoms of sufficient extremity that it represents a significant clinical concern.)

Ms. Cordellione' has clinically elevated scales primarily in the domain of *Externalization.* Individuals with elevated externalization scores are prone to exhibit problematic or self-destructive behaviors as a way of dealing with overwhelming internal states. Such "acting out" behaviors represent avoidance and provide distraction or tension reduction in the service of avoiding negative feelings and internal states. A history of severe child abuse and/or neglect is associated with high externalizing scores.

Ms. Cordellione' produced elevated scores on the scales Tension Reduction Behaviors, Insecure Attachment, Impaired Self-Reference, Defensive Avoidance, and Anxiety. Individuals

with elevations on these scales tend to report some early relational losses and/ or parent mistreatment. These early negative experiences with attachment figures lead to avoidance of close relationships. Over time, the avoidance of painful negative states leads to reduced access to internal states and a lack of awareness of one's own needs, thoughts, feelings and entitlements. Ms. Cordellione' highest scores were on the Tension Reduction Behavior scale. Tension reduction behaviors are external activities engaged in by an individual as a way to modulate, interrupt, avoid or soothe negative internal states, often through self-destructive or self-injurious behaviors, *e.g.* cutting.

Relevant Personal and Medical History

Ms. Cordellione' was born in Texas, where she and two older siblings were abandoned by their biological parents. Left at a foster home, Ms. Cordellione' was assigned a birth date and ultimately adopted, along with her siblings, when she was three years of age. Her adoptive parents were Pentecostal and "military," and the family moved to Alaska when she was five. When she was fourteen, the family returned to their original home state of Indiana.

At about age six, Ms. Cordellione' "knew" she was a girl. She enjoyed cooking, sewing, playing with stuffed animals, and wearing her sister's clothes. She was well aware that she was expected to behave as a boy and engage in sports and stereotypical male activities. Given that expectation, and the rigidity of beliefs the family held, she was unable to express any feelings of femininity, nor could she possibly understand that such feelings were symptoms of early-onset gender dysphoria.

Ms. Cordellione' describes herself as having been a "loner." She relates a history of being sexually abused by her adopted father, perpetuated over a period of several years. She was sent to a boys' school, but dropped out before graduating, eventually earning a GED. Like many gender dysphoric adolescents, Ms. Cordellione' thought that marriage or hypermasculine pursuits would end her female longings. These attempts are ultimately doomed to fail.

During her chaotic adolescence, Ms. Cordellione' grew increasingly tormented and angry. She despised her body, stating that it "didn't fit"… it was "too large, too clumsy." The amalgam of gross childhood neglect, mistreatment, substance abuse and untreated gender dysphoria proved incendiary: In 2001, at age nineteen, Ms. Cordellione' was incarcerated for murdering her stepdaughter.

Psychiatric History

Ms. Cordellione' has a long history of disordered behavior and mood dysregulation that began during childhood. In March, 2008, a note documenting a mental health visit stated: "He spoke of losing faith in God or safety because of being adopted and taken to Alaska and severely abused, that he prayed for the abuse to stop and something awful would happen the next day, that his older siblings did things that he got blamed for because adoptive mom believed that the child who could not give direct eye contact was the guilty one and he had a 'lazy eye'. STATE003201.

Another mental health provider noted: "He spoke about being tied to ceiling with dog leash and harness for two weeks at a time because of acts committed by his brother and sister and blamed on him." STATE0011965.

Ms. Cordellione' has an extensive history of suicide ideation with six suicide attempts, by different means, including overdosing and attempting to set herself on fire. At the behest of the Surgeon General, a plan for identifying populations at risk for suicide and advancement of scientific methods to assess risk has resulted in recent abundant scientific investigation. Several lines of research suggest that single suicide attempters differ significantly from multiple suicide attempters. Multiple attempters, and those who engage in method switching, as Ms. Cordellione' has, are more likely to die by suicide than single attempters.

Her suicidal attempts were interspersed with serious incidents of self-harming behavior. She began cutting parts of her body, and, while incarcerated, burned off part of her fingers by immersing her hand in boiling water. Ms. Cordellione's attempts to disfigure or destroy her body were explained to a prison mental health provider on 11/18/2009: "He describes self-injury as wanting to look on the outside like he feels on the inside…with missing fingers and numerous scars…he feels that is accomplished." STATE003354.

By 2008, Ms. Cordellione' had accumulated numerous diagnoses, including: Posttraumatic Stress Disorder (PTSD); Anti-Social Personality Disorder; Schizoid Personality Disorder; Major Depressive Disorder, Recurrent, Severe, with Psychosis; Paranoid Schizophrenia, Borderline Personality Disorder and Bipolar Disorder.

In tandem with the diagnoses, a panoply of psychotropic medications were administered. In 2009, for example, Ms. Cordellione' was taking buproprion hydrochloride, Tegretol, sertraline, fluphenazine decanoate, and benzotopine.[2]

Sometime in late 2010 or 2011, however, Ms. Cordellione' grew weary of these medications that left her lethargic and with no apparent improvement in her sense of well-being or emotional equilibrium. Notes from that time period confirm: "sleeping 18 hours per day and still feeling tired and finding it hard to get up.." STATE 003201. She made a decision to discontinue all psychotropic medications and to "work on herself--spiritually and mentally."

A mental health intake was performed on 5/15/2014 in accordance with facility transfer-receiving, due to a security level drop. It reads, in relevant part: "He is currently diagnosed with Major Depressive Disorder, Single Episode, in Partial or Unspecified Remission and Borderline P.D. [Personality Disorder]. He has not taken psychotropic medication since 2011. He denied a reoccurrence of symptoms…" A mental status exam performed at that time determined her to be oriented, with logical thought processes, euthymic mood, and absent delusions, suicidal and homicidal ideation.

One barometer of Ms. Cordellione's improved mental health can be adjudged by reviewing mental health providers' Global Assessment of Functioning ("GAF"). The GAF measures how much a person's symptoms affect their day-to-day life on a scale of 0 to 100. In 2006, Ms. Cordellione's records indicate a GAF of 35; by 2012, she had a score of 65; and in 2022 she attained a score of 72[3]; indicative of significant progress.

---

[2] Benzotropine is an anticholinergic medication that works by blocking a certain natural substance (acetylcholine). This helps decrease muscle stiffness, sweating and can stop severe muscle spasms of the back, neck, and eyes that are sometimes caused by psychiatric drugs. It can also decrease other side effects such as muscle stiffness/rigidity (extrapyramidal signs-EPS).

[3] The GAF is based on a scale that was first used in 1962 and has been updated over time. In 2013, the DSM dropped it in favor of a scale designed by the World Health Organization. But government agencies

A GAF of 72 means that a patient can participate in decisions regarding their health care, provide consent, and understand the irreversibility of gender-affirming surgery. However, a GAF of 72 does not alter the medical need for surgery if the individual's symptoms of gender dysphoria remain severe and non-remitting. Inexperienced providers often assume that if a gender dysphoric individual is reasonably well-adjusted, they don't require surgical treatment. This egregious lack of understanding of the seriousness of gender dysphoria, the consequences of failure to treat the condition adequately, and the suffering of individuals afflicted, is a priori evidence of a lack of meaningful experience with this population. Too often, for prisoners this results in a "Catch 22" scenario: If the individual is not functioning well, they are deemed ineligible for surgery, but if they are functioning well,then surgery is not "necessary" because they are "okay." Such reasoning is entirely at odds with the SOC.

A study of phenomenology of gender dysphoric patients published in Clinical Psychology Review found: "for some participants, this feeling of disgust towards their body led to suicidal thoughts or self-harm; individuals felt that death was preferable to continuing to live in their body." Cooper, K., et al., *The Phenomenology of Gender Dysphoria in Adults: A Systematic Review and Meta-Synthesis*, Clin. Psychol. Rev. 2020 80:101875. Decisions regarding the necessity of surgical intervention need to made by specialists who understand the harms of inadequate treatment; the anatomical distress of genitalia prompting surgical self-treatment ideation; the escalation of gender dysphoria over time; the concomitant psychiatric morbidity that only remits with adequate treatment of the gender dysphoria; and the failure of current treatment regimes.

Autumn Cordellione's Gender Dysphoria Diagnosis and Treatment

After years of incarceration, Ms. Cordellione' began to hear about transgender people and to see them portrayed in the media. The more she learned about the condition, the more clarity she gained about her own identity—an identity that she had repressed since childhood. For many individuals raised in resource-poor or strict, religious homes, sex and gender were taboo topics. It is therefore quite common for transgender people to first learn, when incarcerated, that there is a name and resources for the feelings that have persisted since early memory.

Although convinced that she finally understood the source of her inner turmoil, and how that contributed to her crime and self-injurious behavior, Ms. Cordellione' was unsure about the ability to express her affirmed female self in the confines of a male prison. Nevertheless, she stated to a mental health provider "I know I'm a female and I'm not going to keep acting like I'm not.'' She stated that when she came to terms with her gender dysphoria she no longer needed

---

and insurance companies, as well as others, still use it. Scores that fall in the 31-40 range indicate: "Some impairment in reality testing or communication (e.g., speech is at times illogical obscure or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking or mood." Scores that fall in the 71-80 range indicate: "If symptoms are present, they are transient and expectable reactions to psychosocial stressors … no more than slight impairment in social, occupational or school functioning."

to “bottle her emotions, causing explosion, attempted suicide or self or others to be harmed. Instead, she turns to spirituality and meditation techniques.” STATE 001749.

In July 2019, Ms. Cordellione’ began requesting gender affirming hormone treatment (“GAHT”).

On April 4, 2020, Dr. Corissa E. Dionissio conducted a “Gender Dysphoria Evaluation” via telemedicine. Although Dr. Dionissio concluded that Ms. Cordellione’ met the criteria for a diagnosis of gender dysphoria, she raised several issues as a basis for withholding treatment. For one, she questioned the timing of Ms. Cordellione’s disclosure, while simultaneously acknowledging that individuals “may come out at any time.” Secondly, she raised “questions of secondary gain,” while simultaneously acknowledging she “was unable to ascertain secondary gain.” Most egregiously, she conflated genital reconstruction with self-harm: “One must also consider gender affirming bottom surgery as a form of self- harm (penectomy, orchiectomy).” She concluded her assessment, by stating that “the gender dysphoria diagnosis is inconclusive, pending discussion with the gender dysphoria committee.” STATE 001751.

The delay in authorizing hormone treatment for Ms. Cordellione’ was inexcusable and without any legitimate medical basis. There was no medically recognized or clinically appropriate reason, under WPATH guidelines or in my professional experience as a psychologist specializing in treatment of gender dysphoria, to deny hormone treatment to a gender dysphoric individual. The “concerns” Dr. Dionissio raised do not even purport to relate to a medical concern.

Moreover, based on my years of practice, research, and clinical expertise, people do not request hormone therapy unless they actually need it and believe it would help them overcome their gender dysphoria. There are no secondary gains to treatment with cross-sex hormones; and in fact, when they are used incorrectly, or used in the absence of a legitimate medical need, they can be harmful. A hormone therapy regimen in a non-transgender person would make that person ill and profoundly uncomfortable.

One of the most fundamental errors repeatedly made by providers who lack experience in this highly specialized area of medicine, is to confuse the symptoms of gender dysphoria with a co-occurring mental illness, and then denying treatment due to the patient having a co-occurring disorder, in this case a personality disorder.

One of the minimum criteria for treating gender dysphoria is the ability to “recognize and diagnose coexisting mental health concerns and to distinguish these from gender dysphoria.” SOC at 22. Absent a psychotic break, or a patient so delusional as to be unable to consent to the treatment plan, treatment for gender dysphoria almost always should promptly follow a diagnosis. It is expected that most incarcerated persons will have comorbid diagnoses, but by no means should this be weaponized as a reason to deny treatment.

On 6/17/2020, due to Dr. Dionissio’s inability to diagnose gender dysphoria, Ms. Cordellione’ was administered the Minnesota Multiphasic Personality Inventory- 2nd revision (“MMPI-2”) test to “help with identifying potential contraindications to diagnosing and treating gender dysphoria.” STATE0011724.

Mental health professionals who are experienced with gender dysphoria do not administer personality tests when assessing treatment needs, as such tests have no probative value regarding that assessment. A systematic review of the administration of psychometric

tests in transgender individuals requesting treatment questioned the utility in this patient population (Lehmann & Leavey, 2020). As Keo-Meier and Fitzgerald explain:

"The most widely used personality instrument is the MMPI…. Those who are using assessment instruments [such as the MMPI] to help answer the question of whether or not a client is ready for medical transition are using tools that were not created for the purposes they are used for. This is akin to attempting to screw on a lightbulb with a hammer." *Affirmative psychological testing and neurocognitive assessment with transgender adults.* Psychiatric Clinics of North America Journal, 40(1): 2017.

Failing to find a basis for denying Ms. Cordellione' medically indicated hormonal therapy, despite ongoing assessment efforts, the gender dysphoria diagnosis was added to her medical records and she was referred for hormone treatment.

After several years of cross-gender hormones, Ms. Cordellione' has been "*hormonally reassigned*." In other words, she has the same circulating sex steroid hormones as her female peers. Her testosterone levels are consistently in the female reference range. Hormones have a primary effect on the brain, but also regulate every bodily system. Due to continuous hormone therapy, Ms. Cordellione' has the secondary sex characteristics of a female. She has female breast development, softened skin, diminution of body hair, redistribution of body fat consistent with a female-shaped body, loss of muscle mass, and genital changes.

Ms. Cordellione' has also socially transitioned, to the extent possible given her incarceration. She appears female and uses a female name and pronouns. Ms. Cordellione' wears female clothing and spends hours eliminating facial and body hair.

Surgery Is Medically Necessary for Ms. Cordellione' as Treatment for her Gender Dysphoria

Despite hormonal treatment and social transition, Ms. Cordellione' continues to suffer from severe gender dysphoria that causes significant distress and prompts thoughts of surgical self-treatment. She experiences such intense disgust with her male genitalia that she showers with her underwear on, to prevent her from having to see her genitals. At times, she has soiled herself rather than use the toilet, due to the stress associated with viewing her genitals. Due to the persistence and severity of her dysphoria, the anatomical dysphoria associated with her genitals, and the records I have reviewed, genital reconstruction surgery is medically indicated and necessary for Ms. Cordellione'.

While hormones are an essential element of treatment for gender dysphoria, they alone are not sufficient for patients, like Ms. Cordellione', who suffer from severe gender dysphoria. As with all medical conditions, treatment for gender dysphoria must be individually based. Patients who have severe gender dysphoria require both medical and surgical interventions. Individuals with early-onset gender dysphoria, such as Ms. Cordellione', typically suffer the most severe expression of the condition.

When evaluating whether an individual's dysphoria requires surgical treatment, the persistence of the dysphoria, the impairment it creates and the failure of current treatments are the compelling rationale for surgical intervention. For transgender women residing in carceral settings, ideation about surgical self-treatment--auto-castration or auto-penectomy—or actual

attempts, are a telltale sign that treatment is inadequate and surgical intervention is medically necessary. Ms. Cordellione' did once attempt penile ligation[4], but the pain was intolerable.

Ms. Cordellione's own subjective reports evince the persistence and insistence of her female gender identity and demonstrate her severe and ongoing gender and anatomical dysphoria. Particularly significant to my conclusion that surgery is medically necessary is Ms. Cordellione's experience that her genitals are "wrong",--the evidential indication of severe gender dysphoria. Having consolidated her female identity, and having female secondary sex characteristics, Ms. Cordellione' is unable to resolve the agony of having male genitalia.

As explained above, gender-confirmation surgery is the well-documented, effective and necessary treatment for individuals like Ms. Cordellione' who suffer from severe gender dysphoria. Surgery will effectively cure Ms. Cordellione's dysphoria by removing the detested male genitalia and providing congruent uro-genital structures. It will therefore attenuate the symptoms of depression, anxiety and the hopelessness attendant to gender dysphoria. These symptoms do not respond to psychotropic medication.

Ms. Cordellione' Meets the WPATH Standard of Care Criteria for Surgery

Under Version 8 of the WPATH Standards of Care, published on September 15, 2022, the criteria for genital surgery (orchiectomy and vaginoplasty) in male-to-female transgender adult patients are as follow:

1. Gender incongruence is marked and sustained;
2. Meets diagnostic criteria for gender incongruence prior to gender-affirming surgical intervention in regions where a diagnosis is necessary to access health care;
3. Demonstrates capacity to consent for the specific gender-affirming surgical intervention;
4. Understands the effect of gender-affirming surgical intervention on reproduction and they have explored reproductive options;
5. Other possible causes of apparent gender incongruity have been identified and excluded;
6. Mental health and physical conditions that could negatively impact the outcome of gender-affirming surgical intervention have been assessed, with risks and benefits have been discussed;
7. Stable on their gender affirming hormonal treatment regime (which may include at least 6 months of hormone treatment or a longer period if required to achieve the desired surgical result, unless hormone therapy is either not desired or is medically contraindicated). WPATH SOC-8 at S256.

[4] Attempts at surgical self-treatment should not be viewed as evidence of uncontrolled mental illness; on the contrary, such behavior represents a rational intention to eliminate the testosterone by removal of the androgen-producing target organ. Ideation and attempts to perform self-surgery are a priori evidence of inadequate or insufficient care for gender dysphoria.

I conclude that Ms. Cordellione' currently satisfies all of the WPATH SOC-8 criteria for gender-confirmation surgery. Moreover, based on my evaluation of Ms. Cordellione', and my review of her medical records, I conclude that she has satisfied these criteria before they became effective in September 2022.

Prior to September 2022, the operative Standards of Care were the WPATH SOC-7. Those criteria are similar in many respects to the WPATH SOC-8 criteria, but for the avoidance of doubt, I conclude that Ms. Cordellione' today satisfies all of WPATH SOC- 7 criteria for gender-affirming surgery. I address the criteria of the SOC-7 below in each section as appropriate.[5]

Gender incongruence is marked and sustained;

Ms. Cordellione's gender incongruence is marked and sustained. Based on the facts described in this report, my evaluation of Ms. Cordellione' and review of documents, she has persistent and well-documented gender dysphoria and meets the DSM-5 gender dysphoria diagnostic criteria.

Ms. Cordellione' satisfies this WPATH SOC-8 criterion.

Under SOC-7, criteria 1 and 2 of SOC-8 were part of a single criterion requiring that a person have "persistent, well-documented gender dysphoria." For the same reasons stated above and below, Ms. Cordellione' satisfied this SOC-7 criterion.

Meets diagnostic criteria for gender incongruence prior to gender affirming surgical intervention in regions where a diagnosis is necessary to access health care;

Ms. Cordellione' meets the diagnostic criteria for gender dysphoria based on her personal and medical history recited above, and which, Dr. Gale confirmed at a case conference meeting. The Department has acknowledged her diagnosis since 2020. STATE 001726.

Ms. Cordellione'satisfies this WPATH SOC-8 criterion. As noted above, under SOC-7, this criterion required "persistent, well-documented gender dysphoria." For the same reasons stated above, Ms. Cordellione' satisfied this SOC-7 criterion.

Demonstrates capacity to consent for the specific gender-affirming surgical intervention;

Ms. Cordellione' demonstrates the capacity to consent to gender-affirming surgical care.

She has the capacity to make a fully informed decision regarding gender-confirmation surgery and to consent to treatment. She is able to understand the process of surgery and the necessity of post-operative care. She is knowledgeable about the potential complications that can arise in this or any surgical procedure.

As I previously noted, Ms. Cordellione' was able to attend to the entire, video interview I conducted without agitation or restlessness. She has no thought disorders, no brain injury, cognitive impairment or dementia that would render her incapable of providing consent.

[5] The SOC-7 criteria contained two requirements not present in SOC-8. First, the SOC-7 required that a candidate for surgery be of the age of majority in a given country. The age of majority in the United States is 18 years of age. Ms. Cordellione' satisfies this WPATH SOC-7 criterion. Second, the SOC-7 required "twelve continuous months living in a female gender role." Ms. Cordellione' has lived for over twelve continuous months in a female gender role.

My evaluation of Ms. Cordellione' aligns with records regarding her mental health since the initiation of hormones in 2020, which consistently note that her affect is appropriate and her thought processes are logical and directed. Ms. Cordellione' is described by care providers as oriented in all spheres, with no suicidal ideation, delusions or hallucinations, and with normal thought processes. She has been stable without psychotropic medication for years.

Ms. Cordellione' satisfies this WPATH SOC-8 criterion and the prior SOC-7, criterion which required "capacity to make a fully informed decision and to consent to treatment."

Understands the effect of gender-affirming surgical intervention on reproduction

Ms. Cordellione' understands the effect of gender-affirming surgical intervention on reproduction and given her age and her incarceration this requirement is not relevant for assessing her eligibility for surgery. (This criterion had no analogue under SOC-7).

Other possible causes of apparent gender incongruity have been identified and excluded;

There are no possible alternative causes of Ms. Cordellione's persistent gender incongruity. This was confirmed by Dr. Richard Gale who concluded an assessment by stating: "..not appear to give any indication of currently undiagnosed psychopathology that would better explain the offender's transgender identity (e.g., delusional thinking, hallucinations, etc.)." STATE 001724. Ms. Cordellione' satisfies this WPATH SOC-8 criterion. (This criterion had no analogue under SOC-7).

Mental health and physical conditions that could negatively impact the outcome of gender-affirming surgical intervention have been assessed, with risks and benefits have been discussed;

Ms. Cordellione' does not present with any active mental health concerns that would prevent or contraindicate gender-confirmation surgery, and she understands the risks and benefits of surgery.

A diagnosis of mental illness in a gender dysphoric patient does not categorically prevent or contraindicate gender-confirmation surgery. However, providers are mandated to consider the nature of a co-occurring disorder and determine if the disorder is well controlled at the time of surgery.

My assessment of Ms. Cordellione' and a review of her records rules out the presence of any significant medical or mental health concerns. There is no evidence of any thought disorders or impaired reality testing.

During my assessment of Ms. Cordellione', I administered four standardized psychometric instruments to corroborate my clinical assessment. Testing confirmed Ms. Cordellione's self-reported symptoms of anxiety, depression, and hopelessness, (attendant to gender dysphoria), and ruled out psychosis or thought disorders. And, with the passage of time and initiation of hormonal treatment, Ms. Cordellione's medical records reveal the diagnoses attributed to her are considerably less severe.

At least 6 months of stable hormone treatment

Ms. Cordellione' began feminizing hormone treatment in 2020. She has consistently been maintained on hormone therapy since then.

Ms. Cordellione' has undergone at least six months of hormone treatment. She satisfies this WPATH SOC-8 criterion and the prior SOC-7 parallel criterion that required "twelve continuous months of hormone therapy."

Conclusion

It is my understanding that as of July 1, Indiana law has changed so that the Indiana Department of Correction may not authorize, facilitate or provide gender affirming surgery, even when medically indicated. I have serious concerns regarding the blanket denial of medically necessary surgical care to gender dysphoric inmates. Denial of necessary surgical care is medically inappropriate and harmful.

In medicine, treatment decisions follow diagnosis and evidence-based, established care protocols. Medical providers do not withhold treatment from individuals who have a criminal history. Therapeutic interventions are determined based on patients' individual needs, not meted out solely to those who haven't broken the law.

I have reviewed mental health provider notes, and there is a glaring lack of acknowledgment regarding the serious nature of gender dysphoria and the harm of not providing adequate, appropriate care. In particular, there is no acknowledgement of the risks of not providing surgical care to incarcerated transgender women, when such care is medically indicated. As the SOC-8 state:

> [Transgender] people with Gender Dysphoria should have an appropriate treatment plan to provide medically necessary surgical treatments with similar elements to those who reside outside institutions (Brown 2009; Adams v. Federal Bureau of Prisons, No. 09-10272 [D. MO June 7, 2010]; Edmo v. Idaho Department of Corrections, 2020). The denial of medically necessary evaluations for, and the provision of, gender affirming surgical treatments and necessary aftercare is inappropriate and inconsistent with these Standards of Care. WPATH SOC-8 atS106.

Blanket policies restricting or denying particular types of care—such as a refusal to provide gender affirming surgery under any circumstances—are inconsistent with the SOC and the requirements to provide medical treatment based on each individual's medical needs. *See* WPATH SOC-7 at 68 ("Denial of needed changes in gender role or access to treatments, including sex reassignment surgery, on the basis of residence in an institution are not reasonable accommodations under the SOC."); WPATH SOC-8 at S107 ("The denial of medically necessary evaluations for, and the provision of, gender affirming surgical treatments and necessary aftercare [in institutional settings] is inappropriate and inconsistent with these Standards of Care.").

Autumn Cordellione' has persistent and severe gender dysphoria. She has met, and exceeded, all the requirements of the WPATH SOC for surgical intervention, and surgery is medically necessary to treat her gender dysphoria. There are no valid contraindications to surgery, and surgery would effectively cure her gender dysphoria. The diagnosis is certain, and the treatment is curative. Ms. Cordellione' requires genital reconstruction surgery, and transfer to a female facility.

Genital surgery is not elective nor cosmetic. A statute that arbitrarily denies surgical care violates all requirements that prisoners receive medically necessary care Denial of surgical treatment places Ms. Cordellione' and others for whom such care is medically indicated to address a serious medical need, at risk of an ingravescent course of physical and emotional harm.

I declare under penalty of perjury under the laws of the United States of America and that the foregoing is true and correct.

Verification

I verify, under penalty of perjury that the foregoing is true and correct.

Executed this 8 day of December, Evanston, Illinois.
Respectfully submitted,

Dr. Randi Ettner Ph.D.
Dr. Randi Ettner, Ph.D.

APPENDIX A

RANDI ETTNER, PHD
1214 Lake Street
Evanston, Illinois 60201
847-328-3433

POSITIONS HELD

Clinical Psychologist
Forensic Psychologist
Fellow and Diplomate in Clinical Evaluation, American Board of Psychological Specialties
Fellow and Diplomate in Trauma/PTSD
President, New Health Foundation Worldwide
Past Secretary, World Professional Association for Transgender Health (WPATH)
Chair, Committee for Institutionalized Persons, WPATH
Global Education Initiative Committee Curriculum Development, WPATH
University of Minnesota Medical Foundation: Leadership Council
Psychologist, Center for Gender Confirmation Surgery, Weiss Memorial Hospital
Adjunct Faculty, Prescott College
Editorial Board, *International Journal of Transgender Health*
Editorial Board, *Transgender Health*
Television and radio guest (more than 100 national and international appearances)
Internationally syndicated columnist on women's health issues
Private practitioner
Adjunct Medical staff; Department of Medicine: Weiss Memorial Hospital, Chicago, IL
Advisory Council, National Center for Gender Spectrum Health
Global Clinical Practice Network; World Health Organization
Harvard Law School LGBTQ Clinic Leadership Council

EDUCATION

PhD, 1979	Northwestern University (with honors) Evanston, Illinois
MA, 1976	Roosevelt University (with honors) Chicago, Illinois
BA, 1969-73	Indiana University Bloomington, Indiana Cum Laude Major: Clinical Psychology; Minor: Sociology
1972	Moray College of Education Edinburgh, Scotland International Education Program
1970	Harvard University Cambridge, Massachusetts Social Relations Undergraduate Summer Study Program in Group Dynamics and Processes

CLINICAL AND PROFESSIONAL EXPERIENCE

2017-2023	Psychologist: Weiss Memorial Hospital Center for Gender Confirmation Surgery
	Consultant: Walgreens; Tawani Enterprises; Starbucks, Rush University Medical Center
	Private practitioner: clinical and forensic practice
2013	Instructor, Prescott College: Gender-A multidimensional approach
	ICD-11 Member of International Working Group
2011	Consultant to Wisconsin Public Schools
2010	President New Health Foundation Worldwide
2000	Instructor, Illinois School of Professional Psychology
1995-present	Supervision of clinicians in counseling gender non-conforming clients
1993	Post-doctoral continuing education with Dr. James Butcher in MMPI-2 Interpretation, University of Minnesota
1992	Continuing advanced tutorial with Dr. Leah Schaefer in psychotherapy
1983-1984	Staff psychologist, Women's Health Center, St. Francis Hospital, Evanston, Illinois
1981-1984	Instructor, Roosevelt University, Department of Psychology: Psychology of Women, Tests and Measurements, Clinical Psychology, Personal Growth, Personality Theories, Abnormal Psychology
1976-1978	Research Associate, Cook County Hospital, Chicago, Illinois, Department of Psychiatry
1975-1977	Clinical Internship, Cook County Hospital, Chicago, Illinois, Department of Psychiatry
1971	Research Associate, Department of Psychology, Indiana University
1970-1972	Teaching Assistant in Experimental and Introductory Psychology Department of Psychology, Indiana University
1969-1971	Experimental Psychology Laboratory Assistant, Department of Psychology,

Indiana University

INVITED PRESENTATIONS AND GRAND ROUNDS

Clinical Perspectives and the Experience of Transgender Prisoners Federal Death Penalty Strategy Session, 2023

IGEN POLITICS intergenerational politics podcast; July, 12, 2023 Episode 199; Apple Podcast, Spotify, YouTube

Working with Transgender Clients National Employment Lawyers Association, St. Louis, MO, 2023

Shifting Sands: Challenges in Providing Surgical Care American Society of Reconstructive Microsurgery, Miami, FL 2023

The Standard of Care for Institutionalized Persons WPATH 27th Scientific Symposium, Montreal, Canada 2022

Healthcare for Transgender Prisoners Rush University, Department of Plastic and Reconstructive Surgery, Chicago, IL 2022

Sexual Function: Expectations and outcomes for patients undergoing gender-affirming surgery. Whitney, N., Ettner, R., Schechter, L. Rush University, Department of Plastic and Reconstructive Surgery, Chicago, IL 2022

Care of the Older Transgender Patient, Weiss Memorial Hospital, Chicago, IL, 2021

Working with Medical Experts, The National LGBT Law Association, webinar presentation, 2020

Legal Issues Facing the Transgender Community, Illinois State Bar Association, Chicago, IL, 2020

Providing Gender Affirming Care to Transgender Patients, American Medical Student Association, webinar presentation, 2020

Foundations in Mental Health for Working with Transgender Clients; Center for Supporting Community Development Initiatives, Vietduc University Hospital, Hanoi, Vietnam, 2020

Advanced Mental Health Issues, Ethical Issues in the Delivery of Care, Development Initiaves, Vietduc University Hospital, Hanoi, Vietnam, 2020

What Medical Students Need to Know about Transgender Health Care, American Medical Student Association, webinar presentation, 2019

The Transgender Surgical Patient, American Society of Plastic Surgeons, Miami, FL 2019

Mental health issues in transgender health care, American Medical Student Association, webinar presentation, 2019

Sticks and stones: Childhood bullying experiences in lesbian women and transmen, Buenos Aires, 2018

Gender identity and the Standards of Care, American College of Surgeons, Boston, MA, 2018

Expectations of individuals undergoing gender-confirming surgeries Schechter, L., White, T., Ritz, N., Ettner, R. Buenos Aires, 2018

The mental health professional in the multi-disciplinary team, *pre-operative evaluation and assessment for gender confirmation surgery,* American Society of Plastic Surgeons, Chicago, IL, 2018; Buenos Aires, 2018

Navigating transference and countertransference issues, WPATH Global Education Initiative, Portland, OR; 2018

Psychological aspects of gender confirmation surgery International Continence Society, Philadelphia, PA 2018

The role of the mental health professional in gender confirmation surgeries, Mt. Sinai Hospital, New York City, NY, 2018

Mental health evaluation for gender confirmation surgery, Gender Confirmation Surgical Team, Weiss Memorial Hospital, Chicago, IL 2018

Transitioning; Bathrooms are only the beginning, American College of Legal Medicine, Charleston, SC, 2018

Gender Dysphoria: A medical perspective, Department of Health and Human Services, Office for Civil Rights, Washington, D.C, 2017

Multi-disciplinary health care for transgender patients, James A. Lovell Federal Health Care Center, North Chicago, IL, 2017

Psychological and Social Issues in the Aging Transgender Person, Weiss Memorial Hospital, Chicago, IL, 2017

Psychiatric and Legal Issues for Transgender Inmates, USPATH, Los Angeles, CA, 2017

Transgender 101 for Surgeons, American Society of Plastic Surgeons, Chicago, IL, 2017

Healthcare for transgender inmates in the US, Erasmus Medical Center, Rotterdam, Netherlands, 2016

Tomboys Revisited: Replication and Implication; Amsterdam, Netherlands, 2016

Orange Isn't the New Black Yet- Care for incarcerated transgender persons, WPATH symposium, Amsterdam, Netherlands, 2016

Can two wrongs make a right? Expanding models of care beyond the divide, Amsterdam, Netherlands, 2016

Foundations in mental health; WPATH Global Education Initiative, Chicago, IL 2015

Role of the mental health professional in legal and policy issues, WPATH Global Education Initiative, Chicago, IL 2015

Healthcare for transgender inmates; WPATH Global Education Initiative, Chicago, IL 2015

Children of transgender parents; WPATH Global Education Initiative; Atlanta, GA, 2016

Transfeminine genital surgery assessment: WPATH Global Education Initiative, Columbia, MO, 2016

Foundations in Mental Health; WPATH Global Education Initiative; Ft. Lauderdale, FL, 2016; Washington, D.C., 2016, Los Angeles, CA, 2017, Minneapolis, MN, 2017, Chicago, IL, 2017; Columbus, Ohio, 2017; Portland, OR, 2018; Cincinnati, OH, 2018, Buenos Aires, 2018.

Role of the forensic psychologist in transgender care; WPATH Global Education Initiative, Minneapolis, MN, 2017; Columbus, Ohio, 2017.

Pre-operative evaluation in gender affirming surgery-American Society of Plastic Surgeons, Boston, MA, 2015

Gender affirming psychotherapy; Fenway Health Clinic, Boston, 2015

Transgender surgery- Midwestern Association of Plastic Surgeons, Chicago, 2015

Assessment and referrals for surgery-Standards of Care- Fenway Health Clinic, Boston, 2015

Adult development and quality of life in transgender healthcare- Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2015

How do patients choose a surgeon? WPATH Symposium, Bangkok, Thailand 2014

Healthcare for transgender inmates- American Academy of Psychiatry and the Law, Chicago, 2014

Supporting transgender students: best school practices for success- American Civil Liberties Union of Illinois and Illinois Safe School Alliance, 2014

Addressing the needs of transgender students on campus- Prescott College, Prescott, AZ, 2014

The role of the behavioral psychologist in transgender healthcare – Gay and Lesbian Medical Association, 2013

Understanding transgender- Nielsen Corporation, Chicago, 2013
Grand Rounds: Evidence-based care of transgender patients- North Shore University Health Systems, University of Chicago, Illinois, 2011

Care of the aging transgender patient University of California San Francisco, Center for Excellence, 2013

Grand Rounds: *Evidence-based care of transgender patients* Roosevelt-St. Vincent Hospital, New York, 2011

Grand Rounds: *Evidence-based care of transgender patients* Columbia Presbyterian Hospital, Columbia University, New York, 2011

Hypertension: Pathophysiology of a secret. WPATH symposium, Atlanta, GA, 2011

Exploring the Clinical Utility of Transsexual Typologies- Oslo, Norway, 2009

Children of Transsexual Parents-International Association of Sex Researchers, Ottawa, Canada, 2005

Children of Transsexual Parents- Chicago School of Professional Psychology, Chicago, 2005

Gender and the Law- DePaul University College of Law, Chicago, Illinois, 2003

Family and Systems Aggression against Providers, WPATH Symposium, Ghent, Belgium 2003

Children of Transsexual Parents-American Bar Association annual meeting, New York, 2000

Grand Rounds: Gender Incongruence in Adults, St. Francis Hospital, 1999.

Gender Identity, Gender Dysphoria and Clinical Issues:

WPATH Symposium, Bangkok, Thailand, 2014
Argosy College, Chicago, Illinois, 2010
Cultural Impact Conference, Chicago, Illinois, 2005

Weiss Hospital, Department of Surgery, Chicago, Illinois, 2005
Resurrection Hospital Ethics Committee, Evanston, Illinois, 2005
Wisconsin Public Schools, Sheboygan, Wisconsin, 2004, 2006, 2009
Rush North Shore Hospital, Skokie, Illinois, 2004
Nine Circles Community Health Centre, University of Winnipeg, Winnipeg, Canada, 2003
James H. Quillen VA Medical Center, East Tennessee State University, Johnson City, Tennessee, 2002
Sixth European Federation of Sexology, Cyprus, 2002
Fifteenth World Congress of Sexology, Paris, France, 2001
Illinois School of Professional Psychology, Chicago, Illinois 2001
Lesbian Community Cancer Project, Chicago, Illinois 2000
Emory University Student Residence Hall, Atlanta, Georgia, 1999
Parents, Families and Friends of Lesbians and Gays National Convention, Chicago, Illinois, 1998;
In the Family: Psychotherapy Network National Convention, San Francisco, California, 1998;
Evanston City Council, Evanston, Illinois 1997;
Howard Brown Community Center, Chicago, Illinois, 1995;
YWCA Women's Shelter, Evanston, Illinois, 1995;
Center for Addictive Problems, Chicago, 1994
Highland Park Early Child Development Program, Highland Park, IL 1994

Psychosocial Assessment of Risk and Intervention Strategies in Prenatal Patients- St. Francis Hospital, Center for Women's Health, Evanston, Illinois, 1984; Purdue University School of Nursing, West Layette, Indiana, 1980

Psychonueroimmunology and Cancer Treatment- St. Francis Hospital, Evanston, Illinois, 1984

Psychosexual Factors in Women's Health- St. Francis Hospital, Center for Women's Health, Evanston, Illinois, 1984.

Grand Rounds: Sexual Dysfunction in Medical Practice- St. Francis Hospital, Dept. of OB/GYN, Evanston, Illinois, 1990

Sleep Apnea - St. Francis Hospital, Evanston, Illinois, 1996; Lincolnwood Public Library, Lincolnwood, Illinois, 1996

The Role of Denial in Dialysis Patients - Cook County Hospital, Department of Psychiatry, Chicago, Illinois, 1977

PUBLICATIONS

Coleman, E., Radix, A., Bouman, W., Brown, G., deVries, A.L., Deutsch, M., Ettner, R., et. al. Standards of Care for the Health of Transgender and Gender Diverse People, Version 8. *International Journal of Transgender Health*, 23:sup1S1-S259.

Robles, C., Hamidian, A., Ferragamo, B., Radix, A., De Cuypere, G., Green, J., Ettner, R.,

Monstrey, S., Schechter, L. Gender affirmation surgery: A collaborative approach between the surgeon and the mental health professional. *Journal of Plastic and Reconstructive Surgery* in press.

Ettner, R. Healthcare for transgender prisoners. In Garcia (Ed.) Gender Affirming Surgery: An Illustrated Guide and Video Atlas. Springer: in press.

Narayan, S., Danker, S Esmonde, N., Guerriero, J., Carter, A., Dugi III, D., Ettner, R., Radix A., Bluebond-Langner, R., Schechter, L., Berli, J. (2021) Guiding the conversation: Types of regret after gender-affirming surgery and their associated etiologies. *Annals of Translational Medicine,*9(7):605.

Ettner, R., White, T., Ettner, F., Friese, T., Schechter, L. (2018) Tomboys revisited: A retrospective comparison of childhood behaviors in lesbians and transmen. *Journal of Child and Adolescent Psychiatry*.

Ettner, R. Mental health evaluation. Clinics in Plastic Surgery. (2018) Elsevier, 45(3): 307-311.

Ettner, R. Etiology of gender dysphoria in Schechter (Ed.) Gender Confirmation Surgery: Principles and Techniques for an Emerging Field. Elsevier, 2017.

Ettner, R. Pre-operative evaluation. In Schechter (Ed.) Surgical Management of the Transgender Patient. Elsevier, 2017.

Berli, J., Kudnson, G., Fraser, L., Tangpricha, V., Ettner, R., et al. Gender Confirmation Surgery: what surgeons need to know when providing care for transgender individuals. *JAMA Surgery*; 2017.

Ettner, R., Ettner, F. & White, T. Choosing a surgeon: an exploratory study of factors influencing the selection of a gender affirmation surgeon. *Transgender Health*, 1(1), 2016.

Ettner, R. & Guillamon, A. Theories of the etiology of transgender identity. In Principles of Transgender Medicine and Surgery. Ettner, Monstrey & Coleman (Eds.), 2nd edition; Routledge, June, 2016.

Ettner, R., Monstrey, S, & Coleman, E. (Eds.) Principles of Transgender Medicine and Surgery, 2nd edition; Routledge, June, 2016.

Bockting, W, Coleman, E., Deutsch, M., Guillamon, A., Meyer, I., Meyer, W., Reisner, S., Sevelius, J. & Ettner, R. Adult development and quality of life of transgender and gender nonconforming people. *Current Opinion in Endocrinology and Diabetes*, 2016.

Ettner, R. Children with transgender parents in Sage Encyclopedia of Psychology and Gender. Nadal (Ed.) Sage Publications, 2017.

Ettner, R. Surgical treatments for the transgender population in Lesbian, Gay, Bisexual, Transgender, and Intersex Healthcare: A Clinical Guide to Preventative, Primary, and Specialist Care. Ehrenfeld & Eckstrand, (Eds.) Springer: MA, 2016.

Ettner, R. Etiopathogenetic hypothesis on transsexualism in Management of Gender Identity Dysphoria: A Multidisciplinary Approach to Transsexualism. Trombetta, Liguori, Bertolotto, (Eds.) Springer: Italy, 2015.

Ettner, R. Care of the elderly transgender patient. *Current Opinion in Endocrinology and Diabetes, 2013, Vo*l. 20(6), 580-584.

Ettner, R., and Wylie, K. Psychological and social adjustment in older transsexual people. *Maturitas,* March, 2013, Vol. 74, (3), 226-229.

Ettner, R., Ettner, F. and White, T. Secrecy and the pathophysiology of hypertension. *International Journal of Family Medicine* 2012, Vol. 2012.

Ettner, R. Psychotherapy in Voice and Communication Therapy for the Transgender/Transsexual Client: A Comprehensive Clinical Guide. Adler, Hirsch, Mordaunt, (Eds.) Plural Press, 2012.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L., Green, J., Knudson, G., Meyer, W., Monstrey, S., Adler, R., Brown, G., Devor, A., Ehrbar, R., Ettner, R., et.al. Standards of Care for the health of transsexual, transgender, and gender-nonconforming people. World Professional Association for Transgender Health (WPATH). 2012.

Ettner, R., White, T., and Brown, G. Family and systems aggression towards therapists. *International Journal of Transgenderism,* Vol. 12, 2010.

Ettner, R. The etiology of transsexualism in Principles of Transgender Medicine and Surgery, Ettner, R., Monstrey, S., and Eyler, E. (Eds.). Routledge Press, 2007Ettner, R., Monstrey, S., and Eyler, E. (Eds.) Principles of Transgender Medicine and Surgery. Routledge Press, 2007.

Monstrey, S. De Cuypere, G. and Ettner, R. Surgery: General principles in Principles of Transgender Medicine and Surgery, Ettner, R., Monstrey, S., and Eyler, E. (Eds.) Routledge Press, 2007.

Schechter, L., Boffa, J., Ettner, R., and Ettner, F. Revision vaginoplasty with sigmoid interposition: A reliable solution for a difficult problem. The World Professional Association for Transgender Health (WPATH), 2007, *XX Biennial Symposium,* 31-32.

Ettner, R. Transsexual Couples: A qualitative evaluation of atypical partner preferences. *International Journal of Transgenderism,* Vol. 10, 2007.

White, T. and Ettner, R. Adaptation and adjustment in children of transsexual parents. *European Journal of Child and Adolescent Psychiatry,* 2007: 16(4)215-221.

Ettner, R. Sexual and gender identity disorders in Diseases and Disorders, Vol. 3, Brown Reference, London, 2006.

Ettner, R., White, T., Brown, G., and Shah, B. Client aggression towards therapists: Is it more or less likely with transgendered clients? *International Journal of Transgenderism,* Vol. 9(2), 2006.

Ettner, R. and White, T. in Transgender Subjectives: A Clinician's Guide
Haworth Medical Press, Leli (Ed.) 2004.

White, T. and Ettner, R. Disclosure, risks, and protective factors for children whose parents are undergoing a gender transition. *Journal of Gay and Lesbian Psychotherapy,* Vol. 8, 2004.

Witten, T., Benestad, L., Berger, L., Ekins, R., Ettner, R., Harima, K. Transgender and Transsexuality. Encyclopeida of Sex and Gender. Springer, Ember, & Ember (Eds.) Stonewall, Scotland, 2004.

Ettner, R. Book reviews. *Archives of Sexual Behavior,* April, 2002.

Ettner, R. Gender Loving Care: A Guide to Counseling Gender Variant Clients. WW Norton, 2000.

Social and Psychological Issues of Aging in Transsexuals, proceedings, Harry Benjamin International Gender Dysphoria Association, Bologna, Italy, 2005.

The Role of Psychological Tests in Forensic Settings, *Chicago Daily Law Bulletin,* 1997.

Confessions of a Gender Defender: A Psychologist's Reflections on Life amongst the Transgender. Chicago Spectrum Press. 1996.

Post-traumatic Stress Disorder, *Chicago Daily Law Bulletin*, 1995.

Compensation for Mental Injury, Chicago Daily Law Bulletin, 1994.

Workshop Model for the Inclusion and Treatment of the Families of Transsexuals,
Proceedings of the Harry Benjamin International Gender Dysphoria Symposium; Bavaria, Germany, 1995.

Transsexualism- The Phenotypic Variable, Proceedings of the XV Harry Benjamin International Gender Dysphoria Association Symposium; Vancouver, Canada, 1997.

The Work of Worrying: Emotional Preparation for Labor in Pregnancy as Healing. A Holistic Philosophy for Prenatal Care, Peterson, G. and Mehl, L. Vol. II. Chapter 13, Mindbody Press, 1985.

PROFESSIONAL AFFILIATIONS

University of Minnesota Institute for Sexual and Gender Health–Leadership Council

American College of Forensic Psychologists

World Professional Association for Transgender Health

WPATH GEI SOC 8 Certified Member

New Health Foundation Worldwide

World Health Organization (WHO) Global Access Practice Network

TransNet national network for transgender research

American Psychological Association

American College of Forensic Examiners

Society for the Scientific Study of Sexuality

Screenwriters and Actors Guild

Phi Beta Kappa

AWARDS AND HONORS

University of Minnesota, Institute for Sexual and Gender Health; 50 *Distinguished Sex and Gender Revolutionaries* award, 2021

Letter of commendation from United States Congress for contributions to public health in Illinois, 2019

WPATH Distinguished Education and Advocacy Award, 2018

The Randi and Fred Ettner Transgender Health Fellowship-Program in Human Sexuality, University of Minnesota, 2016

Phi Beta Kappa, 1972

Indiana University Women's Honor Society, 1970-1972

Indiana University Honors Program, 1970-1972

Merit Scholarship Recipient, 1970-1972

Indiana University Department of Psychology Outstanding Undergraduate Award Recipient, 1970-1972

Representative, Student Governing Commission, Indiana University, 1970

LICENSE

Clinical Psychologist, State of Illinois, 1980

APPENDIX B

BIBLIOGRAPHY

Ainsworth, T. & Spiegel, J. (2010) Quality of life of individuals with and without facial feminization surgery or gender reassignment surgery. *Quality of Life Research,* 19(7), 1019–24.

American Medical Association. (2008). *Resolution 122 (A-08), Removing Financial Barriers to Care for Transgender Patients.*

American Medical Association and GLMA (2019). *Issue Brief: Health Insurance coverage for gender-affirming care of transgender patients*, https//www.ama-assn.org/system/files/2019-03/transgender-coverage-issue-brief-pdf.

American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Mental Disorders (DSM-III).* Washington, D.C.: American Psychiatric Publishing.

American Psychiatric Association (1987). *Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R).* Washington, D.C.: American Psychiatric Publishing.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).* Washington, D.C.: American Psychiatric Publishing.

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-5).* Washington, D.C.: American Psychiatric Publishing.

American Psychiatric Association, *Gender Dysphoria* (2013), http://www.dsm5.org/documents/gender%20dysphoria%20fact%20sheet.pdf.

American Psychiatric Association (2018). *Position Statement on Access to Care for Transgender and Gender Diverse Individuals,* https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-2018-Access-to-Care-for-Transgender-and-Gender-Diverse-Individuals.pdf.

Bao, A.M. & Swabb, D.F. (2011). Sexual differentiation of the human brain: Relation to gender identity, sexual orientation and neuro-psychiatric disorders, *Frontiers in Neurology,* 32(2), 214–26.

Byne W. (2016). Regulations restrict practice of conversion therapy. *LGBT Health*, 3(2):97-99.

Bauer, G., Scheim, A., Pyne, J. *et al.* (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health*, 15:525.

Beck, A. *et al.* (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients. *American Journal of Psychiatry*, 147(2).

Bennet, K., Qi, J, Kim, H., Hamill, J. et al. (2018). Comparison of 2-year complication rates among common techniques for post-mastectomy breast reconstruction. *JAMA Surgery.*

Bentz, E.K., Hefler, L.A., Kaufman, U. *et al.* (2008). A polymorphism of the CYP17 gene related to sex steroid metabolism is associated with female-to-male but not male-to-female transsexualism. *Fertility and Sterility,* 90(1), 56–59.

Berli, J., Kudnson, G., Fraser, L., Tangpricha, V., Ettner, R., *et al.* (2017). Gender Confirmation Surgery: what surgeons need to know when providing care for transgender individuals. *JAMA Surgery,* 152(4)*,* 394–400.

Bockting, W. (2013). Transgender identity development. In Tolman & Diamond (Eeds.), *American Psychological Association's Handbook of Sexuality and Psychology.* Washington, D.C.: American Psychological Association.

Bockting, W. (2014). The impact of stigma on transgender identity development and mental health. In Kreukels, Steensma, and De Vries (Eds.), *Gender dysphoria and disorders of sex development: Progress in care and knowledge.* New York: Springer.

Brown, G. (2010) Auto-castration and auto-penectomy as surgical self-treatment in incarcerated persons with Gender Identity Disorder. *International Journal of Transgenderism,* 12: 31-39.

Brown, G. & McDuffie, E. (2009) Health care policies addressing transgender inmates in prison systems in the US. *Journal of Correctional Health,* 15(4):280-91.

Chivers-Wilson, K. (2006) Sexual assault and posttraumatic stress disorders: A review of the biological, psychological and sociological factors and treatments. *Mc Gill Journal of Medicine*, (2):111-118.

Chung, W., De Vries, G., Swaab, D. (2002). Sexual differentiation of the bed nucleus of the stria terminalis in humans may extend into adulthood. *Journal of Neuroscience,* 22(3)*,* 1027–33.

Cohen-Kettenis, PT. and Gooren, LJ. (1993). The influence of hormone treatment on psychological functioning of transsexuals. *Journal of Psychology and Human Sexuality,* 1993(4), 55–67.

Colborn, T. Dumanoski, D. & Meyers, W. (1997). *Our Stolen Future*. New York: Penguin.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J. … Zucker, K. (2011). WPATH Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism,* 13, 165–232.

Coleman, E., Radix, A., Bouman, W., Brown, G., deVries, A.L., Deutsch, M., Ettner, R., et. al. Standards of Care for the Health of Transgender and Gender Diverse People, Version 8. *International Journal of Transgender Health*, 23:sup1S1-S259.

Colizzi, M. , Costa, R., & Todarello, O. (2014). Transsexual patients' psychiatric comorbidity and positive effect on cross-sex hormonal treatment on mental health: results from a longitudinal study. *Psychoneuroendocrinology*, 39: 65-73.

Cooper, K., Russell, A., Mandy, W., Butler, C. (2020). The phenomenology of gender dysphoria in adults: A systematic review and meta-synthesis. *Clinical Psychology Review*, 80:101875.

Devor, A. (2004). Witnessing and mirroring: A fourteen stage model of transsexual identity formation. *Journal of Gay and Lesbian Psychotherapy,* 8(1-2), 41–67.

De Cuypere, G., T'Sjoen, G., Beerten, R., Selvaggi, G., *et al.* (2005). Sexual and physical health after sex reassignment surgery. *Archives of Sexual Behavior,* 34(6), 679–90.

Diamond, M. (2013). Transsexuality among twins: identity concordance, transition, rearing, and orientation. *International Journal of Transgenderism,* 14(1)*,* 24–38.

Diamond, L., Pardo, S., Butterworth, M. (2011). Transgender experience and identity. In Schwartz *et al.* (Eds.), *Handbook of Identity Theory and Research.* New York: Springer.

Edgerton, M.T., and Meyer, J. K. (1973). Surgical and psychiatric aspects of transsexualism. In Horton, C. (Ed.), *Surgery of the External Genitalia* (pp. 117–61). Boston: Little, Brown.

Endocrine Society (2020). *Transgender Health, an Endocrine Society position statement,* https://www.endocrine.org/advocacy/position-statements/transgender-health.

Erickson, E. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association*, 4(1), 56–121.

Ettner, R. (1999). *Gender Loving Care.* New York: Norton.

Ettner, R. (2007) The etiology of transsexualism. In Ettner, R., Monstrey, S. & Eyler, A. (Eds.) *Principles of Transgender Medicine and Surgery* (pp. 1-14). New York: Haworth.

Ettner, R., Ettner, F. & White, T. (2012). Secrecy and the pathophysiology of hypertension. *International Journal of Family Medicine*, 2012.

Ettner, R. Care of the elderly transgender patient. (2013). *Current Opinion in Endocrinology and Diabetes,* 20(6), 580-584.

Ettner, R. & Wylie, K. (2013) Psychological and social adjustment in older transsexual people. *Maturitas,* 74(3), 226–29.

Ettner, R. (2015). Etiopathogenetic hypothesis on transsexualism. In Trombetta, Luguori & Bertolotto (Eds.) *Management of Gender Identity Dysphoria: A Multidimensional Approach to Transsexualism* (pp. 47–54). Italy: Springer.

Ettner, R. (2016). Surgical treatments for the transgender population. In Eckstrand, K. & Ehrenfeld, J. (Eds.) *Lesbian, Gay, Bisexual and Transgender Health Care.* (pp. 363–77). New York: Springer.

Ettner, R. & Guillamon, A. (2016). Theories of the etiology of transgenderism. In Ettner R., Monstrey, S. & Coleman E. (Eds.). *Principles of Transgender Medicine and Surgery* (pp. 3–15)*.* New York: Routledge.

Ettner, R., Monstrey, S., & Eyler, A. (Eds.) (2007). *Principles of Transgender Medicine and Surgery* (1st ed.)*.* New York: Routledge.

Ettner, R. Monstrey, S., & Coleman, E. (Eds.) (2017). *Principles of Transgender Medicine and Surgery* (2nd ed.). New York: Routledge.

Fernandez, R., Esteva, I., Gomez-Gil, E., Rumbo, T. *et al.* (2014b) The (CA) in polymorphism of ER*b* gene is associated with FtM transsexualism. *Journal of Sexual Medicine,* 11(3), 720–28.

Fernandez, R., Ramirez, K., Gomez-Gil, E. (2020) Gender-affirming hormone therapy modifies the CpG methylation pattern of the ESR1 gene promoter after six months of treatment in transmen. *Journal of Sexu*al *Health,* 17(9):1795-1806.

Frost, D., Lehavot, K., & Meyer, I. (2015). Minority stress and physical health among sexual minority individuals. *Journal of Behavioral Medicine*. *Journal Behavioral Medicine,* 38(1), 1–8.

Galis, F., Ten Broek, C., Van Dongen, S., *et al.* (2010). Sexual dimorphism in the prenatal digit ratio (2D:4D). *Archives of Sexual Behavior,* 39(1), 57–62.

Garcia-Falgueras, A. & Swaab, D (2008). A sex difference in the hypothalamic uncinate nucleus: relationship to gender identity. *Brain,* 131(12), 3132–46.

Garcia-Falgueras, A. & Swaab, D (2010). Sexual hormones and the brain: As essential alliance for sexual identity and sexual orientation. *Pediatric Neuroendocrinology,* 17, 22–35.

Garn, S., Bundi, A., Babler, W., *et al*. (1975). Early prenatal attainment of adult metacarpal-phalangeal rankings and proportions. *American Journal of Physical Anthropology,* 43, 327-32.

Giordano, S. (2018). Understanding the emotion of shame in transgender individuals – some insight from Kafka. *Life Sciences, Society and Policy,* 14, 23.

Gijs, L., & Brewaeys, A. (2007). Surgical treatment of gender dysphoria in adults and adolescents: recent developments, effectiveness, and challenges. *Annual Review of Sex Research,* 18(1), 178–224.

Goffman, E. (1969). *The Presentation of Self in Everyday Life.* London: Allen Lane.

Gomez-Gil, E., Esteva, I., Almaraz, M,C. *et al.* (2010). Familiarity of gender identity disorder in non-twin siblings. *Archives of Sexual Behavior,* 39(2), 265–69.

Gomez-Gil, E., Zubiaurre-Elorza, L., Esteva, I., Guillamon, A. *et al.* (2012). Hormone-treated transsexuals report less social distress, anxiety and depression. *Psychoneuroendocrinology,* 37(5), 662–70.

Gooren, L.J. (2011). Care of transsexual persons. *New England Journal of Medicine,* 364*,* 1251–57.

Gorin-Lazard, A., Baumstark, K., Boyer, L., Maguigneau, A., *et al*. (2012). Is hormonal therapy associated with better quality of life in transsexuals? A cross-sectional study. *Journal of Sexual Medicine*, 9(2): 531-534.

Green, A. *et al*. (2018).Self-reported conversion efforts and suicidality among US LGBTQ youths and young adults. *American Journal of Public Health*, 110: 1221-1227.

Green, R. (2000). Family co-occurrence of "gender dysphoria": Ten siblings or parent-child pairs. *Archives of Sexual Behavior,* 29(5), 499–507.

Greenberg, R. & Laurence, L. (1981). A comparison of MMPI results for psychiatric patients and male applicants for transsexual surgery. *Journal of Nervous and Mental Disease,* 169(5), 320–23.

Guillamon, A., Junque, C., & Gomez-Gil, E. (2016). A Review of the status of brain structure research in transsexualism. *Archives of Sexual Behavior,* 45(7), 1615–48.

Haas, A. *et al.* (2014). *Suicide Attempts among Transgender and Gender Non-Conforming Adults*, http://williamsinstitute.law.ucla.edu/wp-content/uploads/AFSP-Williams-Suicide-Report-Final.pdf.

Halim, M.L., & Ruble, D. (2010). Gender identity and stereotyping in early and middle childhood. In Chrisler, J.C. & McCreary, D.R. (Eds.), *Handbook of gender research in psychology* (Vol. 1, pp. 495–526). New York: Springer.

Hare, L., Bernard, P., Sanchez, F. *et al.* (2009). Androgen receptor length polymorphism associated with male-to-female transsexualism. *Biological Psychiatry,* 65(1)*,* 93–96.

Hatzenbuehler, M., Bellatorre, A., Lee, Y., *et al.* (2014). Structural stigma and all-cause mortality in sexual minority populations. *Social Science & Medicine*, 103; 333-41.

Henningsson, S., Westberg, L, Nilsson, S. *et al.* (2005). Sex steroid-related genes and male-to-female transsexualism. *Psychoneuroendocrinology,* 30(7), 657–64.

Hines, M. (2011). Gender development and the human brain. *Annual Review of Neuroscience* 34, 69-88.

Jarolím, L., Šedý, J., Schmidt, M., Ondřej, N., Foltán, R., & Kawaciuk, I. (2009). Gender reassignment surgery in male-to-female transsexualism: A retrospective 3-month follow-up study with anatomical remarks. *Journal of Sexual Medicine,* 6, 1635–44.

Keo-Meir, C. & Fitzgerald, K. Affirmative psychological testing and neurocognitive assessment with transgender adults. *Psychiatric Clinics of North America Journal*, 40(1): 2017

Kerlin, S. (2004). The presence of gender dysphoria, transsexualism, and disorders of sex differentiation in males prenatally exposed to diethylstilbestrol: initial evidence from a 5-year study. DES Sons International network. TransAdvocate.org.

Kruijver, F.P. *et al.* (2000), Male-to-female transsexual have female neuron numbers in a limbic nucleus. *Journal of Clinical Endocrinology & Metabolism,* 5(1)*,* 2034–41.

Landen, M. *et al.* (2001). Done is done – and gone is gone: Sex reassignment surgery is presently the best cure for transsexuals. *Lakartidningen*, 98(30-31), 3322–26.

Landen, M. et al. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PloS One,* 6(2*)*: e16885.

Lawrence, A. (2003). Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. *Archives of Sexual Behavior,* 32(4)*,* 299–315.

Lehmann, K. & Leavey, G. Accuracy of psychometric tools in the assessment of personality in adolescents and adults requesting gender-affirming treatments: A systematic review. *European Psychiatry*, January, 2020.

Lobato, M., Koff, W, Manenti, C., Seger, D. *et al.* (2006). A follow-up of sex reassignment surgery in transsexuals: A Brazilian cohort. *Archives of Sexual Behavior,* 35(6), 711–15.

Longo, M., Azanon, E. & Haggard, P. (2010). More than skin deep: Body representation beyond primary somatosensory cortex. *Neuropsychologia,* 48(3), 665–68.

Luders, E., Narr, K., Thompson, P., Rex, D. *et al.* (2006). Gender effects on cortical thickness and the influence of scaling. *Human Brain Mapping,* 27(4), 314–24.

Majid, D. S. A. *et al.* (2020). Neural systems for own-body processing align with gender identity rather than birth-assigned sex. *Cerebral Cortex,* 30, 2897–2909.

Manning, J., Fink, B. Neave, N. *et al*. (1998). The ratio of 2nd to 4th digit length, a predictor of sperm numbers and concentrations of testosterone, luteinizing hormone and oestrogen. *Human Reproduction,* 13, 3000-04.

Marique, O., Odabi, K., Martinez-Jorge, J., Ciudad, P., *et al*. (2018) Complications and patient-reported outcomes in male-to-female vaginoplasty-where we are today: A systematic review and meta-analysis. *Annals of Plastic Surgery* 80(6): 684-91.

Miranda, R., Scott, M., Hicks, R., Wilcox, H., Munfakh, J.L.H., & Shaffer, D. (2008). Suicide attempt characteristics, diagnoses, and future attempts: Comparing multiple attempters to single attempters and ideators. *Journal of the American Academy of Child and Adolescent Psychiatry,* 47(1), 32–40.

Mora, JJ., Guillamon, A., & Pasaro, E. (2014a). Association study of *ERb*, *AR*, and *CYP19A1* genes and MtF transsexualism. *Journal of Sexual Medicine,* 11(12), 2986–94.

Nuttbrock, L, Rosenblum, A. & Blumenstein, R. (2002). Transgender identity affirmation and mental health. *International Journal of Transgenderism,* 6(4).

Park, R., Liu, YT., Samuel, , A. *et al*. (2022). Long-term outcomes after gender-affirming surgery: 40-year follow-up study. *Annals of Plastic Surgery,* 89(4):431-436.

Phelps, V. (1952). Relative index finger as a sex-influenced trait in man. *American Journal of Human Genetics,* 4, 72-89.

Pfäfflin, F., & Junge, A. (1998). *Sex reassignment: Thirty years of international follow-up studies after sex reassignment surgery, a comprehensive review, 1961–1991* (Jacobson, R., & Meier, A., Trans.). Retrieved from http://www.symposion.com/ijt/pfaefflin/1000.htm (Original work published 1992).

Rehman, J., Lazar, S., Benet, A., Schaefer, L, & Melman, A. (1999). The reported sex and surgery satisfaction of 20 postoperative male-to female transsexual patients. *Archives of Sexual Behavior,* 28(1)*,* 71–89.

Rametti, G., Carillo, B., Gomez-Gil, E., Junque, C. *et al.* (2011) White matter microstructure in female to male transsexuals before cross-sex hormonal treatment: A diffusion tensor imaging study. *Journal of Psychiatric Research,* 45(2), 199–204.

Rametti, G. *et al.* (2011). The microstructure of white matter in male to female transsexuals before cross-sex hormonal treatment: A DTI study, *Journal Psychiatric Research,* 45(7), 949–54.

Rodriguez, M. Granada, M. & Gonzalez, V. (2018). Gender incongruence is no longer a mental disorder, *Jorunal of Mental Health and Clinical Psychology*, 2(5):6-8.

Ruble, D., Taylor, L., Cyphers, L., Greulich, F., Lurye, L., Shrout, P. (2007). The role of gender constancy in early gender development. *Child Development* 78(4), 1121-1136.

Savic, I. & Arver, S. (2011). Sex dimorphism of the brain in male-to-female transsexuals. *Cerebral Cortex,* 23(11)*,* 2855–62.

Schneider, H., Pickel, J., Stalla, G. (2006). Typical female 2nd-4th finger length (2D:4D) ratios in male-to-female transsexuals-possible implications for prenatal androgen exposure. *Psychoneuroendocrinology,* 31(2*),* 265–69.

Seelman, K. (2016). Transgender adults' access to college bathrooms and housing and the relationship to suicidality. *Social Work Faculty Publications*, 64.

Shaw, P., Kabani, N., Lerch, J. Eckstrand, K. *et al.* (2008). Neurodevelopmental trajectories of the human cerebral cortex. *Journal of Neuroscience,* 28(14), 3586–94.

Singh, A., Hays, D. & Watson, L.S. (2011). Strengths in the face of adversity: Resilience strategies of transgender individuals. *Journal of Counseling and Development,* 89(1), 20–27.

Smith, Y., van Goozen, S., Kuiper, A., & Cohen-Kettenis, P. (2005). Sex reassignment: Outcomes and predictors of treatment for adolescents and adult transsexuals. *Psychological Medicine,* 35(1), 8999.

Steensma, T., Biemond, R., de Boer, F. & Cohen-Kettenis, P. (2011). Desisting and persisting gender dysphoria after childhood: a qualitative follow-up study. *Clinical Child Psychology and Psychiatry*, *16(4*), 499-516.

Steensma, T., McGuire, J., Kreukels, B., Beekman, A. & Cohen-Kettenis, P. (2013). Factors associated with desistance and persistence of childhood gender dysphoria: a quantitative follow-up study. *Journal of American Academy of Child and Adolescent Psychiatry*, 52(6), 582-590.

Steensma, T., van der Ende, J. Verhulst, F. & Cohen-Kettenis, P. (2013). Gender variance in childhood and sexual orientation in adulthood: A prospective study. *Journal of Sexual Medicine*, 10(11), 2723-2733.

Taziaux, M., Swaab, D., Bakker, J. (2012). Sex differences in the neurokin B system in the human infundibular nucleus. *Journal of Clinical Endocrinology and Metabolism*, 97(12), 2010–20.

Turban JL, Beckwith N, Reisner SL, Keuroghlian AS. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry,* 7(1):68-76.

Uribe, C., Junque, C. Gomez-Gil, *et al.* (2020).Brain network interactions in transgender individuals with gender incongruence. *Neuroimage*, 1:(211).

Uribe, C., Junque, C., Gómez-Gil, E. *et al.* Brain connectivity dynamics in cisgender and transmen people with gender incongruence before gender affirmative hormone treatment. *Scientific Reports* 11**,** 21036 (2021). https://doi.org/10.1038/s41598-021-00508-y.

Verbeek, M., Hommes, M., Stutterheim, S. et al. (2020). Experiences with stigmatization among transgender individuals after transition: A qualitative study in the Netherlands. *International Journal of Transgender Health*, 21:2, 220-223.

Wiepjes C., Nota N., de Blok C, et al. (2018) The Amsterdam cohort of gender dysphoria study: Trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine*, 15:582-90.

Weyers, S. *et al.* (2009). Long-term assessments of the physical, mental and sexual health among transsexual women. *Journal of Sexual Medicine*, 6(3), 752–-60.

World Health Organization. (1992). International Classification of Diseases (10th ed.).

World Professional Association for Transgender Health, Inc. (2008). WPATH clarification on medical necessity of treatment, sex reassignment, and insurance coverage U.S.A.,

http://www.wpath.org/documents/Med%20Nec%20on%202008%20Letterhead.pdf

Zhou, J., Hofman, M., Gooren, L. *et al.* (1995). A sex difference in the human brain and its relation to transsexuality. *Nature,* 378, 68–70.

Zubiaurre-Elorza, L., Junque, C., Gomez-Gil, E., Segovia, S., Carrillo, B., Rametti, G. & Guillamon, A. (2013). Cortical thickness in untreated transsexuals. *Cerebral Cortex* 23, 2855-62.

Zubiaurre-Elorza, L., Junque, C., Gomez-Gil, E., Segovia, S., Carrillo, B., Rametti, G. & Guillamon, A. (2013). Cortical thickness in untreated transsexuals. *Cerebral Cortex* 23*,* 2855-62.

Zubiaurre-Elorza, L., Junque, C., Gomez-Gil, E. & Guillamon, A. (2014). Effects of cross-sex hormone treatment on cortical thickness in transsexual individuals. *Journal of Sexual Medicine,* 11(5), 1248–61.

APPENDIX C

	Phenotype	Hemisphere
Transmen [1]		
Cerebral compartments		
Gray matter	Feminine	
White matter	Feminine	
Intracraneal volume	Feminine	
Cerebrospinal fluid	Feminine	
Cortical thickness		
Global	Feminine	Right
Parieto-temporal	Feminine	Right & left
Parietal	Feminine	Right
Subcortical structures		
Putamen	Masculine	Right
White matter microstructure		
Longitudinal superior	Masculine	Right & left
Forceps minor	Masculine	Right
Corticospinal tract	Masculine	Right
	Defeminized	
Transwomen [2]		
Cerebral compartments		
Gray matter	Masculine	
White matter	Masculine	
Intracraneal volume	Masculine	
Cerebrospinal fluid	Masculine	
Cortical thickness		
Global	Feminine	Right
Orbitofrontal	Feminine	Right
Insular	Feminine	Right
Cuneus	Feminine	Right
White matter microstructure		
Longitudinal superior		Right
Fronto-occipital inferior	Demasculinized	
Forceps minor	Masculine	Right
Cingulum	Demasculinized	Right
Corticospinal tract	Demasculinized	Right
	Demasculinized	

[1] Data transformed from Rametti *et al.* (2011b); Zubiarre-Elorza *et al.* (2013)

[2] Data transformed from Rametti *et al.* (2011a); Zubiarre-Elorza *et al.* (2013)